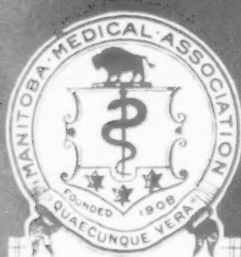


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Psychiatry

Diagnosis of the Common Psychiatric Disorders Seen in General Practice

W. Donald Ross, M.D., B.Sc. (Med.) (Man.)
F.R.C.P. (C)

Associate Professor of Psychiatry, University of Cincinnati

Psychiatrists are often accused of using unfamiliar words for everyday phenomena. We plead guilty. But we do not consider this a heinous crime. Each specialty in medicine and surgery has a technical terminology by which things are labelled more precisely. That doctors in general may be more familiar with the technical language, in say, ophthalmology or obstetrics, than that in psychiatry, may be based on how psychiatry was taught to them, or it may be based on a lack of interest in psychiatry as a specialty, in spite of awareness that emotional problems are important in all branches of medicine.

However, doctors are expected to know more than most other people about the everyday phenomena which are loosely labelled in common parlance as "nervousness," "the blues," "confusion," "stupidity," being "off the beam," and so on. These also have psychiatric labels, which categorize them in accordance with more understanding of the phenomena.

Psychiatric disorders are not rare conditions that affect only a segment of the population. One cannot divide people sharply into "normal" people and "psychiatric cases." It has been estimated that 1 person out of every 10 needs, or will need, some form of psychiatric treatment at some time, and that 1 out of 20 will be hospitalized in a psychiatric unit at some time in his life, but psychiatric diagnoses do not apply only to these people. There is a continuum of degrees of severity and chronicity of emotional disorder from mild and transient, to severe and chronic. The only person without emotional problems is a dead one.

Two recent epidemiological studies have indicated the frequency of psychiatric symptoms in a general population. One of these, reported by Dr. Dorothea Leighton, covered a representative sample of a small town in Canada¹. The other one, conducted by a team under the direction of the late Dr. Thomas Rennie, surveyed an area of a large city in the United States². Without taking time to present the details of each study, we can say that these independent projects revealed similar facts: that about 70% of people suffer from some psychiatric or psychophysiological symptoms and that only 15-20% are completely free from

such symptoms. About 10-20% could be considered borderline so far as such symptoms are concerned but 40% are appreciably handicapped by them. Psychotic symptoms are rare (1-4%) but psychoneurotic (50-60%) and psychophysiological (60-70%) symptoms very common.

The physician need have no qualms about using psychiatric labels, for his medical purposes, even for mild disorders with good prognosis. If he is doing so, without, of course, parading his technical terms before the laity, he is more likely to have a more specific understanding of the problems with which he is dealing.

This does not mean that psychiatric diagnosis, of itself, tells enough about what is wrong to infer the effective solution of the difficulty. Levine has aptly stated: "In the field of psychiatric medicine the individual characteristics of the patient are of far greater importance than is the clinical diagnosis³. However, the categories of psychiatric diagnosis, and the relationships which they have with various types of defenses and kinds of anxieties, constitute a framework around which one can build one's understanding of people with psychiatric and psychosomatic symptoms.

Psychiatric diagnosis, of course, is reached through methods similar to those used for medical diagnosis in general, with emphasis on the type of interviewing which I described in the lecture on listening to patients⁴.

It should be realized that a psychiatric diagnosis is a diagnosis of the total personality reaction of the individual, and it is not mutually exclusive with another medical diagnosis for a particular physiological or pathological disorder in a particular bodily system.

For example, although there can be differential diagnostic problems between coronary insufficiency and anxiety reaction, or thyrotoxicosis and anxiety reaction, coronary insufficiency and anxiety reaction, or thyrotoxicosis and anxiety reaction can coexist. The presence of evidence for one of these diagnoses does not exclude the possibility of the other diagnosis being applicable also, nor the need to take it into account in one's total understanding of the problem. If one keeps this in mind, and considers one's psychiatric diagnosis as a tentative labelling, while following the patient medically, or in some form of psychotherapy, one is prepared to change the diagnosis with a changing emotional state in the patient and not be overlooking "organic disease" nor be baffled by a conversion reaction "changing into" a schizophrenic reaction.

Psychiatrists have also been accused of using a variety of names for the same disorder, of using overlapping diagnoses, and of having labels mostly for more severe disorders. We plead guilty again. But something has been done about this.

A Committee on Nomenclature and Statistics of the American Psychiatric Association has put in a great deal of work in revision of the section on Diseases of the Psychobiologic Unit for the Standard Nomenclature of Diseases and Operations. The need for this had become apparent during and following World War II when the medical services of the armed forces and the Veterans' Administration of the United States were experimenting with nomenclatures which would cover the large number of more transient and milder reactions encountered in more "normal" populations than those previously covered for mental hospital populations. After much research, and solicitation of advice from the membership of the Association and of allied neurological and psychoanalytic associations, a new nomenclature was devised. This has been presented in a manual which constitutes the section on Diseases of the Psychobiologic Unit from the Fourth Edition of the Standard Nomenclature of Diseases and Operations, 1952⁴. Its general outlines will be followed in the suggestions about diagnostic steps to be given, and mention will be made of the common defenses and anxieties which are associated with common representative diagnoses.

Most books on psychiatry are still using a variety of terminologies, and the manual helps on the translation of old terminologies into the new one. An elementary text book on psychiatry which uses the new terminology is recommended for further information⁵. A new psychiatric glossary issued by the American Psychiatric Association is also quite useful⁶.

Table I
Outline of Psychiatric Nomenclature

- A. Brain Disorders
 - Acute
 - Specify disease and indicate whether associated with psychotic reaction, neurotic reaction, behavioral reactions, or without qualifying phrase.
 - Chronic
- B. Psychotic Disorders (Specify Subtype)
 - Schizophrenic Reactions
 - Affective Reactions
 - Involuntional Psychotic Reactions
 - Paranoid Reactions
- C. Psychophysiologic Autonomic and Visceral Disorders (Specify bodily system involved)
- D. Psychoneurotic Disorders
 - Anxiety Reaction
 - Dissociative Reaction
 - Conversion Reaction
 - Phobic Reaction
 - Obsessive-Compulsive Reaction

- Depressive Reaction
- Psychoneurotic Reaction, other

E. Personality Disorders

Specify the pattern or trait disturbance, the social or sexual deviation or addiction (e.g. alcoholism).

F. Transient Situational Personality Disorders

Specify whether gross stress reaction or other adjustment reaction (e.g. of adolescence or of late life.)

G. Mental Deficiency

Specify whether familial, hereditary or idiopathic.

Table I presents a simplified version of the diagnostic categories in the new nomenclature.

The seven broad categories listed in Table I indicate that it is not too difficult to apply the usual kind of medical differential diagnostic thinking to problems involving the total personality. While interviewing, and while deciding along what lines to help the patient to say more, and what further medical, psychological and social diagnostic methods one might use, one asks oneself, "Is there a brain disorder, or not?" (A) and, "Is this person of subnormal intelligence or not?" (G). If the answers to these questions are "no," one has only the five broad categories (B to F) to discriminate in order to label the personality disorder. The next discrimination can be as to whether this is a transient situational disorder or not (F). Then one decides whether there are psychotic features (B), psychoneurotic features (D), behavioral disturbances (including addictions) (E), or whether there is a psychophysiologic disturbance of some bodily system (C), either with or without structural pathological changes in the organs. This system of diagnostic thinking will guard against the overlooking of conditions which require specific medical or social management (e.g., general paresis, mental deficiency, schizophrenic reactions, peptic ulcer, etc.) while giving attention to the defenses and anxieties of the particular person whom you are trying to understand.

The three groups which have been underlined in the table are the common disorders seen in general practice: Psychophysiologic autonomic and visceral disorders, psychoneurotic disorders, and transient situational personality disorders

I shall discuss these three with references to the others only as less common reactions in the background of your thinking while focussing on the conditions you encounter every day.

I mentioned that one gives passing thought to the possibility of brain disorder or mental deficiency but focusses first on the probability that there is a transient situational personality disorder, the most common psychiatric disorder in a "normal" population.

Transient situational disorders are recognized by the history of a previously healthy emotional and social adjustment having been disturbed by

some recent event or stressful situation. A death or separation in the family or among friends, a new job or other change in environment, a recent marriage or birth in the family, or physiological epochs such as adolescence or menopause, or even later aging, may be accompanied by manifestations of anxiety, alcoholism, asthenia, poor efficiency, low morale, unconventional behavior, psychotic or neurotic symptoms or psychophysiological disturbance. If untreated or not relieved, such reactions may progress to chronic psychoneurotic, psychotic, psychophysiological or personality disorders, although the cases where such reactions become chronic are usually ones in which the previous emotional or social adjustment was not so healthy, unless the stress has been particularly overwhelming.

One sub-type of these conditions is particularly important in military medicine or after accidental injury in civilian life. This is the one now called gross stress reaction, formerly called traumatic neurosis. I shall not discuss it in detail but it is responsible for much that is otherwise incomprehensible about delayed convalescence or failure in rehabilitation.

The discrimination between psychotic disorders, psychoneurotic disorders and personality disorders is based on the type of defence being used by the individual against his anxieties. Psychotic defences involve distorted perception of reality, with consequent behavioral deviation, e.g., delusions, hallucinations, disorders of thinking or feeling to a marked degree, or under or over-activity, and difficulty in using relationships with people toward behaving more normally. Psychoneurotic defences involve the formation of symptoms of various kinds, which we shall discuss further, as common disorders. Personality disorders involve the use of total personality patterns, or character traits, as defences against anxiety, without distortion in the intellectual perception of reality. The behavior disorder is repetitive as in the persons who are always having "hard luck," those who are "accident-prone," or those who are always setting too perfectionistic standards for themselves. The sexual perversions and the addictions, including alcoholism, come in this category.

The **psychophysiological autonomic and visceral disorders**, on the other hand, are not to be understood as involving psychological defenses against anxiety. There is unconscious anxiety and conflict, but the symptoms are the result of physiological disorder concomitant with such emotional tension rather than psychological defenses against it. These disorders, of course, are recognized by medical history and physical examination which indicate the organs or bodily systems which mediate the symptoms, e.g., cardiovascular, gastrointestinal, musculo-skeletal, etc.

Now, as we focus down on the common disorders, we should stress that, among the psychoneurotic disorders, the common one of anxiety

reaction, also involves physiological concomitants of anxiety rather than defenses.

The individual is complaining of "nervousness" and of symptoms which are recognizable as the physiological accompaniments of fear. What would you feel if the building next to your office suddenly exploded? Probably apprehension, and even momentary confusion, perhaps a feeling of impending disaster due to tachycardia, shallow breathing with intermittent sighs or breathlessness, possibly diarrhea, or nausea, maybe frequency of urination, tremulousness, and perhaps tension in skeletal muscles, producing headache or backache. Various combinations of these symptoms may be present in anxiety reaction, either chronically, or in recurring acute anxiety attacks. These may come on during the day, or waken the person at night, gasping for air, and posing for the doctor the differential diagnostic problem with acute left-sided heart failure or bronchial asthma. The individual is usually not consciously aware of the conflicts giving rise to the anxiety, but they may be inferred by "triangulation" from the sequence of his associations during interview. Physiological signs of anxiety may be evident on physical examination.

To continue with the other psychoneurotic reactions and some of the psychotic reactions:

Dissociative Reaction involves personality disorganization as a result of stress or as a neurotic disturbance, which may resemble psychosis because of depersonalization, stupor, fugue, amnesia, dream state, somnambulism, aimless running or "freezing." It is to be distinguished from chronic psychosis by its acute and transient nature, even if recurring. It can be managed by reduction of the stress and by psychotherapeutic and medical measures, including sedation, rather than requiring the measures used for psychotic reactions, which often involve secondary problems due to hospitalization as a "psychiatric patient." Dissociative Reaction may be an accompaniment of anxiety, rather than involving even partially successful defenses against anxiety, but some of the symptoms, e.g., amnesia, serve a protective function against anxiety being felt.

Conversion Reaction was formerly called Conversion Hysteria, but, since Hysteria has so many judgmental connotations, it is a term which can well be discarded. Instead of anxiety the person presents a loss or change of function, usually in a part innervated by the voluntary nervous system, although sensory manifestations of conversion can mimic almost any illness, or at least the person's idea of such an illness. Physicians are often intolerant of this kind of defense because of the "secondary gain" which the patient may get from being ill, but if the diagnosis is correct, and the condition is not malingering, then the "dreamt-up" symptoms are no more subject to conscious control than are dreams at night. Only an objective assessment of the anxiety behind this

defense, e.g., of the "primary gain" from the repression and symptom formation, will pave the way for treatment, either by suggestion or by intensive psychotherapy.

Phobic Reaction (formerly Anxiety Hysteria) involves the defense of displacement of internal anxieties on to external objects, e.g., fear of elevators, of crowds, etc. A "job phobia" is frequently a component in work disability and it is related to conflicts about working and to repressed aggressions which are no longer getting a healthy outlet in occupational activity.

Obsessive Compulsive Reaction involves repetitive thoughts or actions, indicating very mixed feelings, so that things are done and then undone again, in a conflict between conforming and rebelling.

Depressive Reaction involves a turning against oneself of aggressive feelings following a separation or loss. When mild and clearly reactive, it can be expected to recover spontaneously or with psychotherapy, but, if it is severe, and if the deviation in behavior constitutes a risk to the person, from failure to eat, or suicidal tendencies, hospitalization and/or electro-convulsive therapy may be necessary, and the condition may be labelled Psychotic Depressive Reaction, under the Affective Reactions among the Psychotic Disorders. Depressed patients show signs recognizable to observation and physical examination, e.g., the furrowed brow and general psychomotor retardation. The Affective Reactions also include manic type of Manic-Depressive Reaction, the opposite in many ways from depression, but still a defense against anxiety, the defense involving over-activity and aggression.

Also on the borderline between Psychoneurotic Disorders and Psychotic Disorders can be mentioned Hypochondriasis, as an example of Psychoneurotic Reaction, other, which involves depressive and paranoid features, the latter because there is a "projection" to parts of the body, a feeling of being persecuted by one's own organs.

Paranoid Reaction involve the defense mechanism of projection in its most marked form. There are delusions of persecution, or grandeur, or of unusual sexual experiences. Paranoid individuals often have enough awareness that others do not share their beliefs, so that they may hide their delusions. An unsophisticated interviewer can be easily fooled into believing the entire story of a paranoid person, unless he is alert to indications of undue suspiciousness and intensity of feeling, and gets information from other sources to assess the total problem.

Involitional Psychotic Reactions are usually depressive, but may be paranoid, and sometimes have schizophrenic features.

The Schizophrenic Reactions are characterized by dissociation, withdrawal and projection, with various primary and secondary symptoms which

need not be detailed. The problem for the physician is to recognize the presence of bizarre features in a personality problem, which would suggest the advisability of a psychiatric referral at an early state of such a disorder when expert treatment may be more efficacious than if delayed too long.

The importance of getting outside information, mentioned for suspected paranoid reactions, and pertinent to other psychotic reactions, is also crucial for suspected personality disorders. For example, it is routine that alcoholics minimize the amount that they are drinking, and when one is faced with a clinical condition which may be due to alcoholism, e.g., tremulousness, or delusions of infidelity toward a marital partner, one should be sure to get a history of the person's drinking and eating habits, from someone other than the patient, who is in a position to know what is going on.

The **Psychophysiologic Autonomic and Visceral Disorders** usually involve another medical diagnosis, as well as this psychiatric diagnosis. When emotional factors are playing a part in a "medical" disease the diagnosis may be both Psychophysiologic Disorder and Neurodermatitis, Rheumatoid Arthritis, Bronchial Asthma, Arterial Hypertension, Peptic Ulcer, Thyrotoxicosis or Epilepsy and so on.

In addition to diagnoses, the new nomenclature provides a system of adding a complementary evaluation which can be very useful. This consists of the following elements:

- (a) External precipitating stress
- (b) Premorbid personality and predisposition
- (c) Degree of psychiatric impairment.

These can be reported in degree, the first two as "none," "mild," "moderate" or "severe" and the third as "no," "minimal," "mild," "moderate" or "severe" impairment, with descriptive phrases indicating understanding of the stress, predisposition and nature of impairment.

Finally, I wish to emphasize that psychiatric diagnoses, especially of the psychoneuroses, are not made by exclusion of so-called "organic" disease. They are made on the basis of positive evidence for a certain type of psychiatric reaction, with understanding of the stresses and previous personality which have contributed to this.

If one cannot understand the reaction as a response of this particular person to his particular stresses, then one looks more carefully for evidence of "organic" disease, including organic disease of the brain, which can sometimes be detected by a few simple tests of immediate memory or of present mental functioning in comparison with the past.

If you have listened with good judgment according to the "rules" which I suggested yesterday, if you have made good use of physical examination and supplementary questioning, and if you keep in mind these general categories of

psychiatric diagnoses, according to positive evidence and not as residues after exclusion, then you will have little trouble in posing answers to the questions so often before you like the one posed to Tit Willow in Gilbert and Sullivan's Mikado:

"Is it weakness of intellect, birdie, I cried,
Or a rather tough worm in your little inside?"

References

1. Leighton, Dorothea G.: The distribution of psychiatric symptoms in a small town. *Amer. J. Psychiat.*, 112: 716 March, 1956.
2. Rennie, T. A. C., Srole, L., Opler, M. K. and Langner, T. S.: Urban life and mental health. *Amer. J. Psychiat.*, 113: 631, March, 1957.
3. Levine, Maurice: *Psychotherapy in Medical Practice*. MacMillan, New York and Toronto, 1946.
4. Committee on Nomenclature and Statistics: *Diagnostic and Statistical Manual; Mental Disorders*. American Psychiatric Association, Mental Hospital Service, Washington, D.C. 1952.
5. English, O. S. and Finch, S. M.: *Introduction to Psychiatry*. Norton, New York, 1954.
6. Committee on Public Information: *A Psychiatric Glossary*. American Psychiatric Association, Washington, D.C., 1957.
7. Ross, W. D.: Listening to Patients. *Manitoba Medical Review*, Vol. 37, No. 7, pp. 439-441, Aug.-Sept., 1957.

Pathology

Pathology 1957 A Review

D. W. Penner, M.D.

It is difficult to select the really significant contributions in the past year, and to point out those that constitute the landmarks in our progress. Rarely can such contributions be accurately evaluated except in retrospect. To the reviewer it would appear that while a considerable amount of worthwhile work has been done, much of it is concerned with previously recorded studies and there is little really new or outstanding.

One of the most interesting and original contributions is the concept of true auto-antibody formation in thyroid disease. The advances in this field have been reviewed recently (*Lancet* 1: 1074, May 25, '57). E. J. Witebsky and his associates (*Immunol.* 76: 417, 1956) first demonstrated that a rabbit develops antibodies against an injected extract of its own excised thyroid. These antibodies are found to be associated with constant and often severe damage to the remaining thyroid. Histologically the changes produced in the thyroid looked like Hashimoto's thyroiditis. Since it had already been shown that in humans lymphadenoid goitre was associated with large amounts of circulating gamma-globulin it remained only to be demonstrated that this represented anti-thyroid antibodies. Further work demonstrated that the active antigen in the thyroid extract was thyroglobulin, and that the antibodies formed against it collect in the colloid of the thyroid. The mechanism suggested is an initial leak of thyroglobulin which attracts a collection of lymphocytes and plasma cells within the thyroid. Cellular destruction resulting from antigen-antibody reaction may cause the release of more thyroglobulin. Finally, some thyroglobulin gets into the general circulation, and antibodies are produced by other tissues which can then be demonstrated in the serum.

Arteriosclerosis

A tremendous amount of work has been published on this subject in the past year. Much of the work relates to diet, obesity and its relationship to arteriosclerosis. Although it is very tempting to suggest that there is a relationship

between diet, blood cholesterol levels, obesity and arteriosclerosis, there is as yet no convincing proof of this. However, one cannot ignore some of the evidence, even though its definitive evaluation must await further work and observation.

In 1932 Dr. G. L. Duff received his Doctor of Philosophy degree. The subject of his research work was "Experimental Studies upon Arteriosclerosis." Until his death in November 1956, Dr. Duff continued to work on the problems of arteriosclerosis. His last article was "The Morphology of Early Atherosclerotic Lesions of the Aorta Demonstrated by the Surface Technique in Rabbits Fed Cholesterol; together with Description of the Anatomy of the Intima of the Rabbits' Aorta and the "Spontaneous" Lesions which Occur in It." (*Amer. Journal of Pathology* 33: 845, Sept.-Oct., 1957). This article is of importance because it represents the last of a long series of contributions to Pathology by an outstanding Canadian scientist who was an authority in the field of atheroma.

Ira Gore and Carlos Jejada (*The Quantitative Appraisal of Atherosclerosis*; *Amer. Journal of Pathology* 33: 875, Sept.-Oct. 1957) describe a useful method for quantitating atherosclerosis seen at post mortem. It is only by such a yard-stick that we can compare the extent and severity of the lesions in various ethnic, geographic and economic groups.

These same two authors used this yard-stick to compare arteriosclerosis of the aorta as seen in Guatemala City and New Orleans (*Comparison of Atherosclerosis in Guatemala City and New Orleans*. *Amer. Journal of Path.* 33: 887, Sept.-Oct. 1957).

The following conclusions were reached:

The 616 unselected necropsies in New Orleans and 324 in Guatemala were limited to the members of the lower income group. In both countries the disease started at an early age and was uniformly present in the second decade. Its severity rose progressively with age, but after age 30, the increase was significantly lower in Guatemala. The calcified and ulcerated lesions, common in the older U.S. group were present but less prevalent in the material from Guatemala. Over the age of

40 there were 51 cases of myocardial infarction among 316 cases in New Orleans material, but only one among the 234 Guatemalans. There were also 10 cases of aortic mural thrombosis and three arteriosclerotic aneurysms in the U.S. material as contrasted to one aortic mural thrombosis in the Guatemalans.

Cancer

As in the past a larger proportion of the literature in the field of Pathology is devoted to the subject of cancer. It is probably correct to state that no really new discovery was made, and no really new tool devised, but certain trends are seen. Morbid anatomy has contributed vastly to our knowledge and it is continuing to do so, but now tumors are being investigated in combination with studies on cellular function, on response to endocrines and on various immunologic aspects. Much of *CANCER*, 10: July-Aug. 1957, is devoted to the subject of endocrines and cancer. Many of the papers describe research on animals and using the results to draw conclusions in man may be completely unwarranted. Much of the work, however, does suggest that endocrines play an important part in the etiology and growth of carcinoma. Some of this work may well have a practical application in the human, as it already has in the estrogen therapy of prostatic carcinoma.

Glucksmann (Hormones, Pregnancy and Cervix "mixed carcinoma" *CANCER* 10: July-August 1957) presents a review of over 2500 cases of carcinoma of the cervix in which serial biopsies were taken both before and during treatment. In his series 87% of the carcinomas were of the squamous cell type, 5% were adenocarcinomas and 8% were mixed or of the adenocanthoma type. The latter type was characterized by a high association with pregnancy. In pregnancy 56% of the tumors were of the mixed type, as against 8% for the whole series. He suggests that pregnancy may be an etiologic factor and believes that the marked hyperplasia of the epithelium of the normal pregnant cervix supports this contention. Further evidence of hormonal effects both in etiology and control of growth in cervical carcinoma is provided by the following observations: Post menopausal women with carcinoma of cervix show a high estrogen level in their vaginal smear. Cancer patients with persistent high counts of cornified cells during or after radiotherapy are less likely to be cured than those who get a decreased count. The degree of response to irradiation of the normal cervical epithelium closely parallels that of the cervical carcinomas in premenopausal but not in postmenopausal patients. Further by changing the differentiation of tumor cells from keratogenesis (estrogen effect) towards a mucin producing adenocarcinoma results in a slowing up of tumor growth. This change can be brought about by radiation.

Very poor end results were obtained in the treatment of these mixed cervical carcinomas.

There were 10% 5 year survivals with radiation alone and 27% with radiation plus surgery in clinical stages 1 and 2 as compared with 63% survivals with radiation alone in the other types.

Carcinoma of the Lung

Much space has been given to the controversial issue of the relationship of bronchogenic carcinoma to smoking. This question was not solved in 1957 nor is it likely to be in the near future but a number of interesting observations were documented. It is of rather ironic interest that the last published work of Dr. Evarts Graham dealt with the experimental production of carcinoma using cigarette tar in which he observed "there seems to be a long period after exposure to cigarette tar has been stopped, during which cancers may appear." This experimental result seems to be in agreement with the clinical observation that a cigarette-induced bronchial carcinoma can appear even though the patient stopped smoking a few years before the cancer was discovered. Dr. Graham was himself an example of this observation. (*CANCER* 10: 43, May-June 1957).

Careful histologic studies of changes in the bronchial epithelium of cancer and non-cancer patients are related to smoking habits by Auerbach and his associates (*New England J. Med.* 256: 97, Jan. 17/57). Four changes are evaluated, basal cell hyperplasia, stratification, squamous metaplasia, and carcinoma in situ. These changes were all seen in non-cancer patients but with increasing frequency in moderate and heavy smokers. The same but more extensive changes were observed in those who died of carcinoma of the lung, and these too were related to smoking habits.

Richard Dall and B. A. Ikil reported on lung cancer and other causes of death in relation to smoking based on the mortality of British doctors (*Brit. M.J.* 2: 1071, Nov. 10/56). He concludes that the death rate from bronchogenic carcinoma in heavy smokers is approximately 20-40 times the death rate in non-smokers. The death rate for those having given up smoking lay between the non-smoking and continued smoking group.

Wynder and Wright report on experimental data in which they demonstrate that condensed cigarette smoke is carcinogenic to mouse skin. (A study of Tobacco Carcinogenesis. *CANCER* 10: 255, March-April '57). They discuss what relationship, if any, this experimental research has to human cancer. They suggest that if an agent is found to be carcinogenic to a variety of animals and if the human epidemiological data are not inconsistent with this finding then the burden of proof lies upon those who claim that these substances are not carcinogenic to man.

Squamous metaplasia of the bronchial epithelium was found in 32% of unselected autopsy cases, 62% in patients dying with chronic pulmonary disease and 56% in patients with bronchogenic carcinoma by Valentine (*CANCER* 10: 272 March-

April, '57). A number of the bronchogenic carcinoma showed squamous metaplasia and intra-epithelial carcinoma adjacent to invasive tumor. These changes are considered to have preceded the invasive carcinoma.

Spontaneous Regression

This topic is always of great interest. There is always the hope that a careful study of these cases might lead us closer to the solution of some facet of the cancer problem. Wm. Boyd in his Gordon Richards Memorial Lecture (Jour. of the Can. Assoc. of Radiology, 8: Sept. '57) reviews the published literature on this subject and illustrates with various selected case histories

Radiation and the Production of Carcinoma

It has long been known that radiation is a carcinogenic agent. Living in our present atomic age has stimulated a tremendous interest in this field. Since the observation that radiologists had a greatly increased incidence of leukemia a large amount of clinical data has accumulated which points out that there are certain very real dangers in the use of therapeutic or diagnostic radiation.

Simpson and Hempelmann report on the association of tumors and roentgen ray treatment of the thorax in infancy (CANCER 10: 42, Jan-Feb., '57). Of a group of 1722 children receiving radiation to the thymus gland during the preceding 27 years, 1502 have been traced. As a control, information was collected about 1933 of their untreated siblings. The largest number of tumors occurred in the thyroid gland and the incidence was considered to be significantly increased in the treated group. Similarly the incidence of leukemia was also significantly increased, but the data are not sufficient to establish a definite relationship to the radiation. The data also suggested an increase in the number of osteochondromas in bones falling within the radiation fields. All these tumors apparently followed smaller amounts of roentgen rays than those previously considered cancerogenic.

Crus, Coley and F. W. Stewart report on eleven cases of post radiation bone carcinoma (CANCER 10: 72, Jan.-Feb. '57). These sarcomas arose in previously normal bone in six cases and in pre-existing bone lesions in five (bone cyst and giant cell tumor). The interval after the completion of roentgen ray therapy varied from 4 to 24 years.

Abbatt and Lea (The Incidence of Leukemia in Ankylosing Spondylitis Treated with X-rays; Lancet 271: 1317, Dec. 29, 1956) compared two large series of cases of x-ray treated and of untreated ankylosing spondylitis. They concluded that because of the greatly increased incidence of leukemia in the treated group that irradiation played a major role in the production of the observed cases of leukemia.

Palmer and Spratt (Pelvic Carcinoma Following Irradiation for Benign Gynecological Diseases. Am. J. Obst. & Gynec. 72: 496, Sept. 1956) studied 746 patients who had received radiation chiefly for

uterine fibroids. The minimal interval following treatment was 12 years. On the basis of expected incidence their series showed 6 times the expected rate for corpus carcinoma, 2.5 times for cervix and 3-4 times for ovary, bladder and rectum.

Stewart et al (Lancet 2: 447, Sept. 1, 1956) give a preliminary report on a survey being conducted on the environmental conditions before and after birth of 1500 children who died of leukemia or malignant disease before the age of 10 in the years 1953-1955. A control group consisting of an equal number of children of the same age and sex are being investigated. This review demonstrates a significant increase (approximately twice) in the incidence of leukemia and malignant disease in children whose mothers had diagnostic radiography of the abdomen during the antenatal period.

A good review of the whole subject of nuclear and allied radiation has been published by the Medical Research Council: The Hazards to Man of Nuclear and Allied Radiation. London. Her Majesty's Stationery Office, 1956.

Cytology

Much work continues to be done in this field, especially in the evaluation of cytology as a screening procedure for the detection of uterine carcinoma. Bader and associates reported on 2750 cases in which the tampon method was used as a screening device for uterine carcinoma (CANCER 10: 332, March-April, 1957). The Draghy tampon was self inserted by the patient and routine vagino-cervical smears were taken for comparison. The conclusion reached was that tampon smear compares favorably with those of the vagino-cervical smear.

A similar study by Scott, Brown and Reagon came to the opposite conclusion (Am. J. Obst. & Gynec. 73: 349, Feb. '57) and on the basis of their results suggest that the tampon method should not be used for a screening procedure. Tampon method was found to be better than routine cervical smears in corpus carcinoma, 94% as effective in invasive carcinoma, but only 50% as effective in non-invasive carcinoma and 10% as effective in detecting atypical hyperplasias.

Smith and associates (Am. J. Obst. & Gynec. 73: 598, March, 1957) found that the percentage of basal cells present was a good gauge of radiosensitivity. This basal cell response was present in the preradiation smears as well as during radiation. When basal cells are in excess of 45% of the total cellular reaction clinical regression was found to be good, below 30% it was considered to be poor.

Song reported on the significance of positive vaginal smears in extra-uterine carcinoma. (Am. J. of Obst. and Gynec. 73: 341, Feb. '56). Malignant cells were found in the vaginal smear of ten patients with extrauterine carcinoma. In the cases that did not involve the oviduct many tumor cells were seen free in the lumen of the oviduct. It is suggested that if a cytologic diagnosis of carcinoma

is made on vaginal smears and investigation of cervix and corpus reveal no tumor, an extra-uterine primary must be considered.

Hoeg studied washings from oviduct and from the pouch of Douglas (J. Obst. & Gynec. Brit. Emp. 63: 899, Dec. '56). He found tumor cells in 18 of 25 cases of adenocarcinoma of the corpus uteri in washings of the oviduct. In 6 of 20 patients tumor cells were found in washings from the pouch of Douglas.

Hick et al (Am. J. Path. 33: 459, May-June '57) give an interesting report on regeneration and malformation of the nervous system eye and mesenchyme of the mammalian embryo following radiation injury.

Transfusion of Bone Marrow in Irradiated Mice

Congdon and Urso (Am. J. Path. 33: 749, July-Aug. '57) have studied the effect on survival of transfusion of homologous bone marrow intravenously to lethally irradiated mice. Their results suggest that this procedure increases the survival time, even though the mice subsequently died.

Studies of Placenta in Spontaneous Abortion

Much work has been done on the cause of spontaneous abortions but many unanswered problems still remain.

J. D. Gray (Am. Jour. of Obst. and Gynec. 72: 615, Sept. '56) briefly reviews the various concepts held on the etiology of spontaneous abortion and presents a study of the histologic structure of the placenta. In 38 of a series of 47 cases he found changes of collagenosis (connective tissue disease) which suggest to him that in some cases ground substance hypersensitivity plays an essential role. The histologic changes noted in the villi consist of ground substance metachromasia, the presence of collagen, fibrinoid necrosis and hyalinization. His study left unanswered the question of cause or effect—i.e. do these lesions precede or follow the death of the fetus?

The Sex Chromatin and Its Application

Since the demonstration of histologically recognizable differences between male and female cells by Murray L. Barr and his associates much work has been done to apply this device to study errors in sex development. (In the female in the resting cells of epidermis the sex chromatin is recognized as a single planoconvex body, about one micron in diameter, located on the inner surface of the nuclear membrane. Less than 10% of the male cells show this chromatin mass.)

In a series of 59 cases of hermaphroditism the cytologic evaluation of sex proved of greatest value. All the female pseudo-hermaphrodites had female-type nuclei, while all the male pseudo-hermaphrodites had male-type nuclei. The rare true hermaphrodites have either female-type or male-type nuclei with the former predominating. (Modern Trends in Obstetrics and Gynecology, 2nd series London: K. Bowes, Butterworth & Co., Ltd. 1955, Chap. 7.).

Joseph H. Kiefer and his associates (Sex Chromatin Determination in Intersex States: J. of Urology 77: 762, May '57) point out that tumors retain the sex chromatin characteristics of the host, except for some testicular teratomas which have female type nuclei.

A particularly interesting observation was made in cases of Klinefelters' Syndrome (testicular hypoplasia). The cells are usually of the female type in this disorder. In most cases of Turner's Syndrome (ovarian or gonadal dysgenesis) male-type nuclei are present. The theoretical and practical implications of these observations are comprehensively discussed. Interesting observations and speculations are made by Carpentier and associates (Lancet 1: 316, April '56) in a case of ovarian gonadal dysgenesis associated with a dysgerminoma which they describe. Cells from vaginal secretion showed the male-type nuclei.

Tenczar and Streitmatter confirmed the observation of Davidson and Smith (Am. Jour. of Clinical Path. 26: 384, 1956) that the polymorphonuclear leukocyte of the human female contains a distinctive nuclear sex chromatin appendage. They concluded that the determination of genetic sex from peripheral blood films was accurate and easier than using skin biopsy. Other observers have felt that the method was not as accurate because of variation in the appearance of the sex chromatin of polymorphs in cases where there were abnormal hormone levels.

K. A. Porter (Brit. Jour. of Exper. Path. 38: 40, Aug. '57) used the nuclear sex differences to identify donor leucocytes from marrow taken from females and injected into male rabbits after irradiation.

Heart

In the past few years a number of publications have appeared pointing to the relationship of carcinoid tumors and cardiovascular disease. Although not the most recent publication, the article by McKusick (Bull. of the Johns Hopkins Hosp. 98: 13, Jan. '56) reviews the literature and presents two new cases. It has now been established that carcinoid tumors (especially those that metastasize) produce a material known as 5-hydroxytryptamine (enteramine, serotonin, thrombocytin). In a certain number of cases with liver metastases there is an associated cardiac valvular lesion with heart failure, a particular type of telangiectasia and episodic cutaneous vasomotor phenomena. In McKusick's case all the heart valves show a valvulitis. It is suggested that 5-hydroxytryptamine which is elaborated by the tumor was directly responsible for the valvulitis and the cutaneous arterio-venous fistulae and pulmonary and systemic hypertension may increase valvular stresses which help in the production of valvulitis.

Infantile Endocardial Fibroelastosis

Schaffer (A.M.A. Arch. of Path. 63: 281, Mar. '57) reviews the infantile and adult type with special

emphasis on etiology and concludes that abnormal currents in the blood stream may be responsible for the thickened endocardium. He feels that these abnormal pressures may act in utero or in infancy. He believed he could demonstrate peculiarities in cardiac structure and function which would produce these abnormal currents. He discards as unlikely two of the most popular theories of etiology namely, a genetically determined congenital lesion and/or hypoxia.

Liver Disease

Higginson and associates (Am. Jour. of Path. 33: 29, Jan.-Feb. '57) reviewed a total of 876 post mortems, and 215 liver biopsies were studied from which it was concluded that dietary factors were probably important in the fatty liver seen in infancy which was rarely followed by fibrosis and necrosis. In the other and adult types it was concluded that severe malnutrition was not the basic etiologic factor.

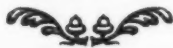
More has been written about chronic idiopathic jaundice with an unidentified pigment in the liver first reported by Dukin and Johnson (Medicine 33: 155, 1954). John and Knudson (Am. J. Med. 21: 138, July 1956) report two cases in siblings, a man aged 29 and a woman aged 34 who had been icteric from childhood. The identity of the pigment noted in liver sections was still not settled. There appears to be a selective inability of the liver to excrete certain end products of pigment metabolism.

The series of papers by Hans Elias dealing with the anatomy of the single cell anastomosing plates of the liver parenchyma have been extended to anatomical studies of the development of cirrhosis. Along with H. Popper (Am. J. Path. 31: 405, 1955) he has shown the multicellular atypical

structure of the regenerating nodules and the varying pattern of the splitting fibrous septa of cirrhosis. They have also supported the other work showing the development of anastomotic channels from portal to hepatic veins probably by way of previous sinusoids which have been depleted of their parenchymal boundaries. Anastomoses also developed between the hepatic arteries and portal veins and these have been considered to contribute to portal hypertension. Many papers have added Chlorpromazine to the list of drugs which are hepatotoxins. Werther and Korelitz (Am. J. Med. 22: 351, March '57) describe 22 cases. Lindsay and Skahen (A.M.A. Archives of Path. 61: 84, Jan. '56) present histologic appearances of the lesions with centrilobular swelling of the parenchymal cells and a "cholangiolitic" type of jaundice characterized by no changes in the larger bile ducts but the presence of bile pigment masses in the smaller canaliculi of the inner third of the lobule. The process appears to represent an idiosyncrasy requiring a definite incubation period and bearing only slight relationship to the dose. Its incidence has been variously reported in from 0.2 to 4% of treated patients.

Ectopic Ovarian Decidua Without Pregnancy

William B. Ober (Am. Jour. of Path. 33: 199, March-April '57) documents 16 cases in which an ectopic decidual reaction was present in the ovary in the absence of pregnancy. It was concluded that the stimulation of the appropriate cells was due to progesterone or progesterone-like substances elaborated in the corpus luteum (in 14 cases a functioning corpus luteum was demonstrated). In the absence of a corpus luteum the adrenal cortex was considered to be a possible source of the hormone.





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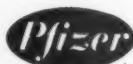
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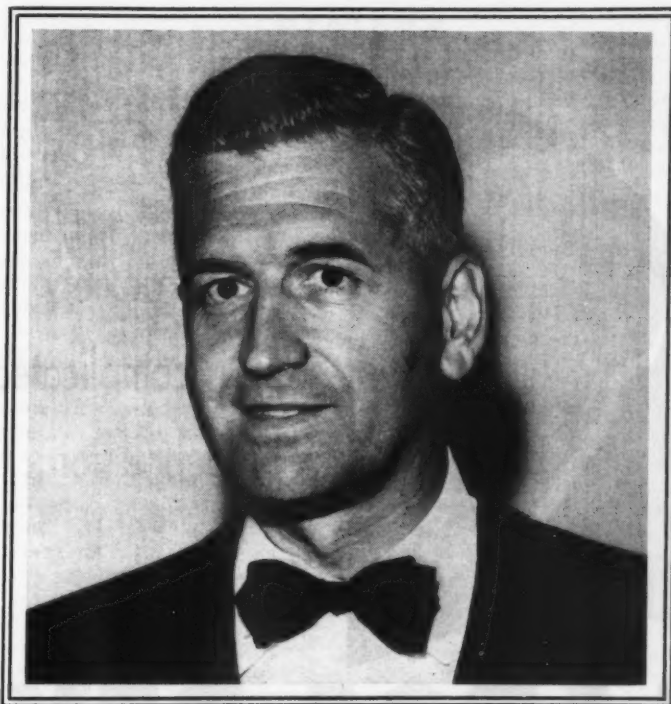
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Clarence Benjamin (Ben) Schoemperlen was born at Strathclair, Manitoba, in March, 1913. He received his early education there, matriculating from Strathclair High School, Isbister scholarship in 1930. He graduated from the University of Manitoba Medical School in 1937, having completed his junior rotating internship at St. Boniface Hospital. Part of his post-graduate education was obtained at Hammersmith Post Graduate Medical School, London, England. He now holds a Specialist's Certificate in Internal Medicine from the Royal College of Physicians and Surgeons of Canada, and is a Fellow of the American College of Chest Physicians, a Fellow of the American College of Physicians and a member of the American and International Broncho-Esophagological Associations.

He practises internal medicine with the Manitoba Clinic, in Winnipeg and is actively associated with the medical staffs of Deer Lodge, the Winnipeg General, Children's and Misericordia Hospitals. His chief interest is in Broncho-Esophagology. He holds the rank of Assistant Professor of Medicine at the University of Manitoba.

During the war, Dr. Schoemperlen served overseas from January, 1940, to December, 1945, with the R.C.A.M.C. and at war's end was discharged with the rank of Lieutenant-Colonel. He saw action in Sicily, Italy, and North-Western Europe.

Dr. Schoemperlen has for some time been actively concerned in the affairs of the Manitoba Medical Association, having been Honorary Treasurer in 1947 and 1948 and Honorary Secretary in 1949 and 1950. In October, 1955, he was elected Second Vice-President. In March, 1957, he was elected a member of the Board of Directors of M.M.S.

Ben married the former Margaret Corner. They have three children; two daughters and a son. He is well known for his interest in sport, having acted on the Executive of the Winnipeg Rugby Football Club since 1946. At present he is Chairman of the Medical Committee for the Blue Bombers.



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Urology

Urological Survey, 1957

Earl K. Vann, M.D., F.R.C.S. (C)

406 Medical Arts Bldg.

Winnipeg 1, Manitoba

The purpose of this survey is to bring to the attention of the practicing physician and surgeon a few of the significant contributions to the Urological literature for the past year. References to new experimental work are numerous. However, I shall attempt to present material in the limited space available that should prove both interesting and useful to the practicing physician.

The Newer Sulfonamides¹

Combined sulfonamides and the highly soluble sulfonamides lessen the problem of renal obstruction and toxicity. Triple sulfonamides offer rapid absorption with sustained levels and relatively little toxicity; however, they can be given only orally. Sulfisoxazole (Gantrisin) may be given orally, intramuscularly and intravenously. It is readily absorbed, relatively nontoxic, excreted rapidly, and highly soluble. Acetyl gantrisin is tasteless and may be given only by mouth. It gives slightly more prolonged blood levels than gantrisin proper, but not as high levels as those obtained with Sulfadiazine. Sulfadimetine (Elkosin) is highly soluble, less rapidly absorbed than Sulfisoxazole, and more readily excreted than Sulfadiazine, Sulfisoxazole and the triple sulfonamides. It is effective in urinary infections and may be effective systemically when used in combination with other sulfonamides. Sulfadimetine and Sulfamethylthiadiazole (Thiosulfil) are highly soluble, sparingly acetylated, and rapidly excreted. Thiosulfil and its acetylated form are so soluble, that fluids may be restricted and the drug may be given in lower dosage. It is generally thought that preparations which provide effective sustained serum levels of sulfonamides are just as or more effective in urinary tract infections than are the highly soluble, rapidly excreted sulfonamides which are concentrated in the urine. Sulfaethylthiadiazole (Sul-spanion) is a highly soluble drug with low acetylation, and the rather prolonged excretion of the spansule preparation makes the possibility of sustained therapy with less frequent dosage a reality. It may be given orally and intravenously but the intramuscular administration is painful. Sulfonamides in lipid emulsions (lipotriazine, lipodiazine, lipogantisin) also give prolonged and sustained blood levels for more than eight hours. Kynex is also excreted very slowly and it may be used in small and infrequent doses. A therapeutic blood level may be maintained for two days after a single oral dose.

Sulfonamides are inexpensive and easily administered. Severe allergic reactions along with

superimposed infections are being encountered with the use of antibiotics. In addition, the incidence of antibiotic-resistant bacteria is increasing. Since most of the bacterial infections of the urinary system are due to micro-organisms sensitive to the sulfonamides, it would appear advantageous to use this group of drugs for mild infections and to reserve the more potent antibiotics for sulfonamide-resistant strains and more serious illnesses.

Clorpactin WCS-90²

This appears to be a useful drug in the treatment of chronic interstitial cystitis and non-specific bladder infections. Vincent J. O'Connor states that this compound, a chlorine derivative that has detergent properties, is a topical germicide and has been used successfully in the treatment of tuberculosis of the bladder. A solution of clorpactin releases hydrochlorous acid to the water and buffers itself to a pH of 6.5. The chemical is non-irritating and non-toxic in the concentrations usually used. A few seconds of contact with the chemical in vitro destroys most of the common pathogenic bacteria. Clorpactin has an astringent hemostatic effect, and the vapor from the chemical itself penetrates directly into the tissues for a fraction of a millimeter or perhaps a millimeter. The oxidizing effect of a drug has a salutary effect in overdistention treatment of interstitial cystitis.

Overdistention of the bladder with a 0.2% solution of clorpactin was done in 24 patients with intractable chronic interstitial cystitis. The improvement obtained has been so dramatic that further experiments and applications of its use seems warranted. All patients had marked decrease in frequency and urgency and marked increase in bladder capacity.

The Use of the Intestine in Urology³

During the past two years there has been a great deal of interest aroused in the use of ileum for restorative and corrective surgery within the urinary tract. In May, 1957 I had the privilege of attending the annual meeting of the American Urological Association in Pittsburgh. There were no less than twelve papers presented on different aspects of this particular subject. Charles A. Wells of the University of Liverpool has summarized the three main groups of cases in which segments of ileum may be utilized. They are as follows:

Ileal Ureterostomy

Reports on a total of 212 patients were available. Most of these patients (92) underwent cystectomy for carcinoma of the bladder but other indications for ileal ureterostomy were congenital deformities with incontinence (45), large vesical fistulas (20), contracted bladder (19) and others. Several conclusions from these operations are worthy of note. Of 114 patients surviving the operations it was

apparent that simple mucosa-to-mucosa approximation of the ureters to the ileal loop (Nesbit technique) gave the best pyelographic results. No tunnel was advised for these anastomoses. Pyelonephritis occurred in only 7 percent of these cases. Blood chemistry values were unchanged following operation, even if the ureters were dilated and the kidneys were hydronephrotic.

The author recommended a rubber collecting apparatus which had a separable flat flange which glued to the skin and was reinforced by a belt, to which a latex bag could be attached.

The mortality rate in this first group of patients was very high, 25 percent, and when associated with cystectomy for cancer, the mortality rate was 30 percent. The author emphasizes that many of these patients were poor operative risks. The most frequent hospital complications were ileus, urinary fistula, wound dehiscence, and mechanical obstruction. A total of 120 patients (57 percent) out of 207 patients treated by ileal ureterostomy had some type of complication while in the hospital. This compared to 44 percent complications of ureterocolic anastomosis in a similar series reported in 1951. Ileus seemed to predispose the patients to other difficulties and the author strongly advises an indwelling Miller-Abbot type tube following surgery. The well-being of the surviving patients is striking, according to the author, and is a great contrast to the post-operative appearance of the patient treated by ureterosigmoidostomy.

Ureteric Replacement

A total of 56 patients formed this group. The chief indications for ureteric replacement by ileum were tuberculosis of the bladder and ureter (27), ureteral damage (10), ureteral tumor (5) etc. Of 48 patients surviving operation for ureteric replacement by ileum, hydronephrosis was made worse in only one patient by the procedure. The mortality was 7 percent and no electrolyte abnormalities were present.

Ileocystoplasty

Ileocystoplasty was reported in 55 cases. A blind loop of ileum was anastomosed to the bladder in 47 cases, and a sheet of open ileum was utilized in eight patients. Vesical tuberculosis (23) and nontuberculosis cystitis (22) were the most frequent indications. Seven cases of Hunner's ulcer were so treated. The overall hospital mortality was 9 per cent. In half of the patients the result was excellent and in six out of seven the relief of pain was considered worth the effort. Of the seven patients with Hunner's ulcer, there was only one failure, although the follow-up was rather short. There was no electrolyte disturbance noted in the ileocystoplasty patients, and mucus in the urine did not offer a problem.

Delayed Cystography and Voiding Cystoureterography⁴

When opaque mediums are instilled into the urinary bladder and retained continuously while

x-ray exposures are obtained at intervals during the following one to three hours, the resultant film studies are called delayed cystograms. If x-rays are taken, in a patient with ureteral reflux, in the erect position during voiding, the diagnostic technic is called voiding cystoureterography. The degree of bladder distention has no relation to whether reflux will occur, be it immediate, delayed, recurrent, unilateral or bilateral or will occur during voiding. Overdistention of the bladder is not necessary to demonstrate reflux during delayed cystography or voiding cystoureterography. Reflux does not occur in a normal urinary tract. It occurs in some cases in which the pathological cause cannot be found. It is not possible to predict the reflux competence or incompetence of a ureteral orifice on the basis of cystoscopic appearance.

Delayed cystography and voiding cystoureterography have repeatedly proved that intravenous urograms and retrograde pyelograms can be completely misleading. Far advanced ureteral and renal dilatation have been demonstrated by these cystographic technics in patients who had comparative intravenous and retrograde studies that were interpreted as normal.

Urinary infections, continuous or recurrent; neurogenic defects, congenital or acquired; prenatal structural and functional variations from the normal and postnatal obstructive uropathies may contribute alone or in variable combinations to the cause and occurrence of ureteral reflux. It is probable that the obstructive lesions that undoubtedly initiate and cause persistence of reflux may vary to a degree not previously suspected. It is possible that unrecognized minor congenital displacements and malformations, in combination with neurogenic defects of minor degree, may result in some major variations in vesicoureteral physiology.

Transurethral or open surgical removal of bladder neck obstructions should be done promptly to eliminate residual bladder urine and to halt progression of ureteral and renal reflux dilatation. Regression of upper tract dilatation following surgical revision of the bladder outlet may be partial or, in occasional instances, complete. Children with reflux are coached to void at two hour intervals during the day and are awakened to void twice during the night. They must not strain to void. The regimen is the same for all patients in whom reflux occurs while voiding. Voiding ureteral reflux has been known to persist in some patients even after complete surgical removal of the reflux-initiating bladder neck obstruction. Continued or recurrent pyuria in children with previously existing vesical neck obstructions surgically removed may be the direct result of persistence of the reflux. In some patients, lysis of periureteral fascial adhesions is necessary.

Diagnosis of Intermittent Hydronephrosis⁵

The importance of pyelography during episodes of pain is emphasized by Reed M. Nesbit. Patients

with intermittent hydronephrosis may have entirely normal pyelograms between attacks. A pyelogram should be taken during pain so that the hydronephrosis can be visualized. Persistent dilatation of the renal pelvis depends on a continuing obstruction which interferes with normal emptying. If the mechanism causing intermittent hydronephrosis is a fascial band or an aberrant vessel which might exert pressure on the ureteropelvic junction only in unusual circumstances, abnormality of the pyelogram might occur only on such occasions. The musculature of the upper urinary tract possesses great resiliency, and normal pyelograms do not necessarily exclude possibility of intermittent obstructive uropathy.

Current Status of Chemotherapy of Renal Tuberculosis⁶

Current status of chemotherapy of Renal Tuberculosis was studied by John K. Lattimer of New York. To date, no new decline in incidence has been observed, despite the advent of chemotherapy. The most effective drug regimen is 1 Gm. streptomycin twice weekly, 100 mg. isoniazid three times/day and 5 Gm. sodium PAS three times/day, simultaneously and continuously for a year. Treatment for 18 or 24 months may be even more effective. Bed rest, plus high vitamin intake, is combined with chemotherapy. As mentioned previously, Clorpactin 90 has been effective in ameliorating symptoms of tuberculous ulcers of the bladder.

Association of Smoking with Cancer of the Urinary Bladder in Humans⁷

No review of current literature would be complete without referring to possible carcinogenic factors and smoking.

Some investigators have reported production of urinary bladder cancer in mice by intraoral application of tobacco tar. Records of patients over age 45 with and without cancers of various parts of the body seen at the Roswell Park Memorial Institute from 1945 to 1955 were studied by Drs. Lilienfeld, Levin and Moore. Analysis indicated that a significantly larger proportion of men with urinary bladder cancer smoked cigarettes than did other classes of patients chosen for comparison. This association was limited to those who gave a history of having smoked for 30 years or more. The association was of a lower degree than that found in the case of lung cancer. In a similar analysis of women with bladder cancer, no association was found.

There is now both experimental animal evidence and statistical evidence in human beings that cigarette smoking and bladder cancer are associated, indicating that a carcinogenic agent exists in cigarettes. Cigarette smoking is not a specific agent in the sense that it is one whose presence is necessary for production of the disease. Other etiologic factors are known to be involved.

Cancer of the Prostate: Plea for Early Diagnosis⁸

Drs. Nourse and Mertz (Indianapolis) believe that prostatic cancer is the commonest neoplasm in men over 50. The incidence in autopsy series varies from 14% to 26% and is 25% in all men with symptoms of prostatic obstruction. The neoplasm commonly arises in the posterior lobe (75%), where it can be palpated easily. Early diagnosis can often be made by rectal examination. The beginning lesion is usually a small localized area of induration felt at the apex or in one of the lateral lobes. If a lesion is suspected, a perineal exposure should be done and a section of the nodule removed for biopsy. Perineal needle or aspiration biopsy and transrectal biopsy are not generally recommended. In late, inoperable carcinoma, the gland is frequently stony hard, nodular and fixed to the peri-prostatic tissues and/or the pelvic wall. The tumor growth can be felt outside the capsule about the seminal vesicles and vasa deferentia, and the patient may have symptoms of obstruction. An elevated serum acid phosphatase level is usually pathognomonic of metastasis, but a normal value would not rule out disseminated or localized neoplasm.

If the neoplasm is confined to the prostate gland, it is operable, preferably by a radical retropubic prostatectomy or a radical perineal prostatectomy. Survival after radical surgery on tumors confined to the gland has been as high as 50% in 10 years. If the neoplasm has spread beyond the confines of the prostate, the suggested treatment is transurethral resection to provide palliation for obstruction. Orchiectomy with estrogen therapy is likewise indicated.

Elective Prostatectomy⁹

While there is no disagreement on the need for prostatectomy in patients with acute urinary retention, a large bladder residual, recurrent or persistent urinary infection or recurrent hematuria caused by an obstructing prostate, there is disagreement on the need for surgery in patients with minimal symptoms of prostatism and a small residual. A new patient with prostatism should have a complete urological and general physical examination during the first office visit. In many instances, it will be necessary to supplement the investigation with estimation of blood urea nitrogen and intravenous pyelogram and a determination of the residual urine. Prostatectomy is unlikely to improve symptoms of frequency, urgency and nocturia in a patient without bladder residual of 60 cc's. or more, but will improve a slow or thin, hesitant urinary stream.

An office patient with a definitely palpable or percussible bladder residual that is not causing discomfort should not be catheterized unless he is ready to accept immediate hospitalization, since the hazards of infection and bleeding are too great. The patient should be catheterized if the x-rays suggest not too large a residual. Catheterization will tell if the patient is hypersensitive, if

there is obstruction in the urethra, whether spasm is present and to what degree, whether the bladder has tone and, if irrigating fluid is placed in the bladder and the patient allowed to void, whether there is much residual. Bladder residuals have been reasonably constant at different times in the same patient within a 10-30 cc. variation.

The commonest course of prostatism is a slow progression of symptoms. Many patients have a level of symptoms or obstruction that may well remain static for a long time. Urologists cannot always predict whether renal function will deteriorate in a patient with an obstructing prostate who has an uninfected residual urine of 60cc. or less. The causes of frequency and nocturia in prostatism are not definitely known. Perhaps vascular changes in the kidneys result in a delay of output of urine after intake of fluid during the day or a renal situation exists in which the kidneys produce urine in more or less constant volume per hour during the 24 hours rather than by a schedule of increased output followed by a period of rest. If the renal condition is a factor in nocturia, then prostatectomy will not necessarily eliminate the symptoms.

I realize it is impossible to completely cover the many advancements and newer concepts of every aspect of urological practice. I sincerely hope that the above subjects will prove to be practical and interesting subjects appearing in the current literature, and be of some use to the practicing physician.

References

1. The Newer Sulfonamides. Medical Clinics of North America, 41: 539-551, March, 1957.
2. Clorpectin WCS-90. Quarter Bulletin N.W. University Medical School, 29: 392-395, Winter, 1955.
3. Use of the Intestine in Urology. Charles A. Wells, British Journal of Urology, 28: 335-350, Dec., 1956.
4. Delayed Cystography and Voiding Cystoureterography. Journal of Urology, 74: 749-759, Dec., 1955.
5. Diagnosis of Intermittent Hydronephrosis. Journal of Urology, 75: 767-771, May, 1956.
6. Current Status of Chemotherapy of Renal Tuberculous. Journal of Urology, 75: 375-379, March, 1956.
7. Association of Smoking with Cancer of Bladder in Humans. A.M.A. Archives Internal Medicine, 96: 129-135, Aug., 1956.
8. Cancer of Prostate: Plea for Early Diagnosis. Journal Indiana, M.A., 49: 403-407, April, 1956.
9. Elective Prostatectomy: Journal of Urology, 76: 131-136, Aug., 1956.

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Anaesthesiology

Recent Advances in Anaesthesia

M. Minuck, M.D.

Marjorie R. Bennett, M.D.

The most significant advance in recent years has been the recognition of the anaesthetist as a specialist. The dedicated anaesthetist sees himself as a clinical pharmacologist and a clinical physiologist. Of more realistic and practical significance has been his acceptance as a member of a team. This team consists of the internist, the surgeon and the anaesthetist. It is with this concept in mind that the anaesthetist now is able to approach the patient as a consultant, aiding in his pre-operative preparation, and during the operation, minimizing the effects of the stress of surgery and anaesthesia. Finally, in the post-operative period, he takes the responsibility for treating any post-operative complications directly or indirectly attributable to the anaesthetic.

Anaesthesia is a relatively new field in medicine and therefore changes are taking place more frequently, perhaps, than in the other branches of medicine.

The following is not an attempt to cover the field of anaesthesia completely but to discuss some of the more important highlights of recent advances.

The Tranquillizing Drugs

Since 1952 reports on the clinical use of chlorpromazine have been appearing in the literature^{1, 2}. It has been credited with an amazing variety of usefulness. Its pharmacological properties have been thoroughly investigated by Dobkin and his co-workers^{3, 4}, M. Bourgeois-Gaverdin and numerous other workers. The elucidation of its many properties made chlorpromazine particularly useful to the anaesthetist, who used it for premedication, for the prevention of operative shock, and for the prevention and treatment of certain undesirable post-operative complications such as vomiting, retching, delirium and hiccoughs.

For many years chlorpromazine was used by anaesthetists the world over; in many cases, for routine premedication. Before long, as more experience with chlorpromazine was obtained, certain undesirable side-effects were noted. Tachycardia and hypotension occurred frequently; but most confusing and embarrassing was the total inability of the anaesthetist to predict what effect a specific dose would have when injected either intravenously or intramuscularly. In personal experiences with the drug we have encountered a severe, prolonged hypotension to about 50 mm/Hg systolic in a husky young 200 pound male with a dose of only 10 mgs intramuscularly. On the other hand, we have encountered no effect when larger doses were used in feeble and elderly patients.

The most alarming complication has been the incidence of jaundice occurring with chlorpromazine therapy. Generally this jaundice has disappeared when chlorpromazine was discontinued, but often it remained as a puzzling complication.

This disturbing toxicity led to an intensified investigation of other phenothiazine derivatives in order to find one which would have the range of activity of chlorpromazine but without the disturbing side-effects. As a result of these studies chlorpromazine has been largely removed from the anaesthetist's armamentarium and replaced by promethazine (Phenergan)^{5, 7}. Promethazine has been found to be a valuable agent for pre-operative sedation, as a supplement to the milder anaesthetic agents, as an anti-emetic during spinal and during regional anaesthesia, or following surgery and as a powerful antihistaminic. This drug is particularly useful for the prevention and treatment of laryngo and bronchospasm.

To date no serious toxic effects have been reported with promethazine, and one feels that this drug has so far proven to be a useful and a permanent drug in the anaesthetist's armamentarium. Chlorpromazine is still useful for the treatment of hiccoughs. Since promethazine does potentiate the depressant properties of narcotics, the precaution of decreasing the dose of the narcotic by 50% when administered in conjunction with promethazine must be adhered to.

Inhalation Anaesthesia

In the past few years the main investigation has been to discover an anaesthetic agent which is non-inflammable and stable in the presence of soda lime, but still retaining its potency with very little toxicity. By far the most promising of these new inhalation agents has been Fluothane. It can be used either by the open drop method or the semi-closed method. It is pleasant in odor and non-irritating. Secretions are diminished, and bronchial constriction is absent⁸. It is easy to use with other agents such as Sodium Pentothal or Nitrous oxide. Relaxants are rarely necessary for intubation, but are usually required for upper abdominal operations⁹, and their action is potentiated by some ganglionic blocking effect exerted by Fluothane. The drug does cause a marked fall in blood pressure in about 40% of cases¹⁰, due in part to its ganglioplegic effect, but more specifically to a central depressant action on vasomotor mechanisms¹¹. There is also some depressant effect on the myocardium, and arrhythmias may occur⁹. Peripheral vasodilation occurs, but capillary bleeding is diminished. Respiration is depressed and should be controlled if respiratory acidosis is to be prevented⁹. Respiration and blood pressure both return to normal when anaesthesia is discontinued. No clinical evidence of liver disturbance has

occurred, but tests of liver function are being continued¹². A special vaporizer capable of accurately controlling very small changes in concentration is being developed, but in the meantime the Fluotec Vaporizer is satisfactory¹³. Rapid recovery and a low incidence of vomiting is claimed for the drug⁸. It is a promising addition to our list of anaesthetic agents, but should only be used by experienced anaesthetists.

Fluoromar is another volatile anaesthetic liquid which can be used in the vaporizers of our anaesthetic machines in a closed or a semi-closed system. It is compatible with soda lime and has a relatively low flammability. It is not sufficiently volatile to be useful in open drop techniques¹⁴. Its pleasant smell and non-irritating qualities make it acceptable for induction, which is rapid, as is recovery. Anaesthesia is easily deepened and lightened without breath-holding or laryngospasm¹⁵. Analgesia is excellent and there are apparently no effects on liver or kidneys. Toxicity to the myocardium is reputed to be negligible¹⁶. An overdose causes bradycardia, and respiration is depressed in the deeper planes of anaesthesia. Tachypnoea occurs if no morphine is given pre-operatively¹⁴. Fluoromar seems particularly suited to such procedures as dental surgery, orthopedics, some gynecological procedures and urology.

One of the essential pieces of equipment when one is administering an anaesthetic is the endotracheal tube, and since the almost universal acceptance of controlled hyperventilation to keep the patient as nearly physiological as possible, cuffed tubes are a necessity. Dr. John Adriani and Dr. Morton Phillips have published some work which removes some of our fears as to the complications believed possible from the use of cuffed tubes.

They found that rupture of the cuff only occurred when four times the usual amount of air was used to inflate the cuff rapidly, and several attempts were necessary before the cuff would break. Dogs were killed after this procedure was carried out and no damage to the trachea, bronchi or alveoli was discovered. The only report in the literature of this accident occurring mentioned injuries strikingly similar to those resulting from explosion.

The area of the contact between the cuff and the trachea was congested if the cuff had been left inflated for an hour or more. This congestion was seen in dogs examined immediately after intubation but was absent in dogs studied several days after intubation.

The efficacy of the cuff in protecting the trachea from aspiration after regurgitation was found to be perfect.

Electrocardiographic studies were done, and while cardiac irregularities were common before, during, and after intubation, these could not be correlated with the time of inflation of the cuff.

Pooling of secretions distal to the cuff in the trachea was minimal if the cuff was not too far from the end of the endotracheal tube²⁰.

Intravenous Anaesthesia

Neraval has been introduced as an ultra short-acting intravenous anaesthetic agent. Although it is possible to get return of reflexes fairly quickly after Pentothal if used in "balanced anaesthesia," orientation is often delayed, and there is a need for a new intravenous agent.

Neraval is a thiobarbiturate with a second sulphur atom. It is rapidly destroyed and eliminated by the liver and kidneys. It is used in 2½% solution, and induction should be slower than with pentothal in order to prevent coughing. It is less potent than pentothal. A fall in blood pressure occurs, and respiration is depressed, although less so than with other barbiturates. It is compatible with relaxants. Laryngospasm and bronchospasm do not occur¹⁷. In a comparison with Pentothal, it was found that although there was no significant difference in mean recovery time, a noticeable number of patients receiving Pentothal had a prolonged recovery time while none of those receiving Neraval had a prolonged recovery time. It was significantly less variable¹⁸.

Electroencephalographic patterns during anaesthesia are being recorded for different agents, and it is becoming more apparent that the indications of depth of anaesthesia vary with the agent that is being administered. Continued multi-channel recording is expected to furnish us with more useful information and may contribute to our knowledge of the site of action in the brain of the various anaesthetic agents¹⁹.

Local and Regional Anaesthesia

The search continues for a non-toxic local anaesthetic agent which is capable of producing a rapid and profound degree of anaesthesia. Most promising in recent years is 2-Chloroprocaine-hydrochloride (Nesacaine). This drug was first studied by Dr. F. F. Foldes in 1952²¹ and introduced into clinical anaesthesia a few years later. Pharmacological tests indicate that Nesacaine is twice as potent as procaine. Its duration of action is short, for it is hydrolyzed rapidly by plasma cholinesterase. Toxic reactions are rare on account of this rapid hydrolysis, nor does Nesacaine irritate the tissues.

This drug is particularly useful for infiltration anaesthesia when used in a 1% or a 2% concentration and for caudal or epidural anaesthesia when used in a 3% concentration. Because of its excellent penetrating capacity, it may be the agent of choice for caudal or epidural blocks. Analgesia is usually complete in 7 to 10 minutes and a single dose without adrenaline may last from 45 minutes to one hour. Epinephrine may be added in order to prolong the analgesia. The total single dose of Nesacaine should not exceed 1 gram.

In a review of this kind it might be profitable to discuss the most recent thinking on epidural or peridural anaesthesia. This technique, first introduced by Dogliotti in 1936²², enjoyed wide popularity, but of late anaesthetists seem to be losing their enthusiasm for this technique. Bonica and his co-workers recently reviewed their experiences with 3,637 cases²³. Their main anaesthetic agent was Xylocaine 1%, although all the commoner local anaesthetic agents were used. Their principal complications were hypotension of various degrees—50% of cases, toxic reactions 3.2%. Perforation of the dura 2.2%: there were 79 cases of perforation of the dura. Interestingly enough, 24 of these developed headaches. Since the usual size of the needle employed was 18 gauge, accidental penetration of the dura may naturally be followed by headache in a large proportion of cases. The rate of failures in this series was 6%. Others have reported a failure rate as high as 20%. Backache following epidural anaesthesia enjoyed an incidence of 2.41%.

The authors' conclusions were that peridural anaesthesia has a limited use only. It may be valuable for deliveries; it may be useful for various operations of the lower extremities and perineum; certainly it is a valuable aid in the treatment, diagnosis and prognosis of certain medical illnesses, viz: treatment of acute pancreatitis, prognosis in peripheral vascular disease. Personal conversations with other anaesthetists who have been advocates of this technique in the past, confirmed this view²⁴. In the poor risk patient, the trend is for light general anaesthesia with controlled or assisted respiration. Where regional anaesthesia is required, the more controllable sub-arachnoid block is generally preferred.

A new technique which is worthy of note is the trans-vaginal pudendal block as advocated by Apgar, V.²⁵. The technique is simple. One merely palpates the ischial spine transvaginally on each side. Then a needle, held between the first and second fingers, is directed to this site, then re-directed medially to a point inferior to the tip of the spine, and lastly inserted to a depth of 1 cm. After aspiration to rule out intravascular injection, the anaesthetic solution (xylocaine 1% or procaine 2%) is then injected. This is performed bilaterally and the anaesthesia of the pudendal region is then complete. This technique is most excellent for obstetrical cases.

The Hypotensive Technique

The deliberate production of hypertension in order to control operative bleeding has been the subject of numerous papers in anaesthetic and surgical journals both here and abroad since Gardner, in 1946²⁶ first described his method of controlling bleeding by arteriotomy. Various other techniques have been described since that time. Griffiths & Gillies²⁷ have used total spinal block to produce a blood pressure of 60 mm Hg. systolic.

This may be considered relatively safe when the hypotension is "vasodilator" in type rather than "vasoconstrictor" as is characteristic of arteriotomy. Various drugs which paralyze sympathetic ganglia have been used, viz: Hexamethonium, Pentamethonium, Pentolinium tartrate (Ansolsen). Drugs, such as Arfonad act directly on the vascular smooth muscle as well as being ganglion blocking agents. This latter drug's action is exceedingly brief and must be administered by continuous intravenous drip. Dibenzylamine is an excellent vasodilator but due to its prolonged action, is not suitable for the production of hypotension for surgery. Other drugs that may act as hypotensive agents are Regitine, Histamine, Nitrates and Procaine.

Of all the techniques and drugs, Arfonad has come to be considered the safest for many reasons²⁸. Because of its rapid and evanescent action one can start and end the period of hypotension with relative ease, but even this drug has its disadvantages, such as the development of tachyphylaxis, occasional tachycardia and rarely, prolonged hypotensive effects. After reviewing the recent literature pertaining to this technique, one may make the following statements:

1. There is a wide range of serious contraindications to the use of the hypotensive technique, i.e. arteriosclerosis, cardiac disease, shock, anemia, tachycardia, extremes of age, hypovolemia, lack of blood for replacement, inexperience of the anaesthetist, etc.

2. The complication rate following the use of controlled hypotension is very high. Investigations in Great Britain and Ireland²⁹, and also in the U.S.A.³⁰ have revealed a complication rate of 1 in every 32 cases and 1 in every 27 cases respectively; the mortality rate was staggering—1 in 459, and 1 in 136 cases respectively.

3. The possibilities of complications and mortality, then, must be considered whenever this technique is contemplated. Controlled hypotension must be reserved for those cases only where the indications are clear-cut and the technique life-saving. Rarely only may it be used to shorten the surgical period or for the convenience of the surgeon. The following, then, are the main indications for the use of the hypotensive technique:

- a) Certain vascular tumors or cerebro-vascular aneurysms.

- b) Operations associated with a large blood loss, e.g. Hemi-pelvectomy, large scale spinal fusions, complete pelvic extirpation for carcinoma, etc.

- c) A patient with a very unusual blood group limiting the supply of blood available for replacement.

- d) Treatment of pulmonary oedema of cardiac origin³¹.

- e) Control of severe systemic hypertension which occasionally follows large vessel surgery, e.g. insertion of a Hufnagel valve.

Hypothermia

Methods for decreasing the oxygen demand have been attempted for many years. Hibernation by the use of drugs was first investigated by Laborit and his co-workers in 1950³². At the same time Bigelow³³ devised a method of external cooling to bring down the patient's temperature and thus decrease the metabolic rate. Numerous techniques have been utilized: Cooling in a tub of cold water, packing in ice, cooling blankets, intragastric balloons containing cold water, washing the pleural space with cold water and intravenous injection of cold fluids. The net result was to reduce the temperature to 30° (a range of 28° to 32° centigrade) and thereby the oxygen requirements have been reduced as much as 45%.

The use of hypothermia has widened the scope of cardiovascular surgery in particular. It has also been of great help in neurovascular surgery³⁴, and perhaps of greatest benefit in the cases of extremely poor risk patients undergoing major surgical procedures. In the latter instance, Albert, S. N.³⁵ et al, advocate the use of only moderate temperature reduction. On the opposite side must be listed the long duration of time required to produce the desired temperature fall and the diverse monitoring systems that one is obliged to use for the constant supervision of the patient. A further limiting factor in the use of hypothermia has been the not infrequent occurrence of ventricular fibrillation. Causative factors of this complication include altered blood calcium/potassium ratio, carbon dioxide retention, rate of change in serum carbon dioxide, blood pH changes, intra-ventricular manipulation and others. Confusing evidence appears in the literature regarding this technique. Solomon³⁶ and his co-workers have shown a reduced adrenal response to stress whereas Phyllis Knocker³⁷ by the aid of beautifully colored photographs, has demonstrated changes that occurred with severe stress. The time that the circulation may be safely interrupted under hypothermia is also in doubt³⁸.

The development of the extra-corporeal pump oxygenator will perhaps, in the future, provide a safer technique for open heart surgery and major cardiovascular surgery. Experiments with very deep hypothermia with animals is now being carried on in various centres^{39, 40}. One feels that the value of mild or moderate hypothermia i.e. above 30° centigrade is possibly established, whereas deep hypothermia i.e. 28° or lower is still in the experimental stage.

Electrical Anaesthesia

Of more than passing interest, perhaps, has been the demonstration by Robert C. Knutson⁴¹ and his co-workers of the successful production of electrical anaesthesia. Although this technique was first suggested in 1880, it was not seriously attempted until 1954. Complications, such as cardiac irregularities, hypotension, etc. occurred when attempted

in man. Perhaps different frequencies or longer or shorter wave lengths will ensure better results, then we may see the depressed patient with a surgical condition having both his illnesses cured at the one sitting.

Conclusion

The most promising and practical advances in anaesthesia and related subjects have been discussed in the light of our own personal experience up to the present. In such a rapidly changing field, we must expect that important contributions and changing concepts will constantly appear in the literature.

References

1. Laborit, H. and Huguenard, P.: Technique actuelle de l'hibernation artificielle, *Presse Med.* 60: 1455 (Oct.) 1955.
2. Burne, J. W.: Pharmacology of chlorpromazine and promethazine, *Proc. Roy. Soc. Med.* 47: 617 (Aug.) 1954.
3. Dobkin, A. B., Gilbert, R. G. B. and Lamoureux, L.: Physiological effects of Chlorpromazine, *Anaesthesia* 9: 157 (July) 1954.
4. Bourgeois-Gavardin, M., Nowill, W. K., Margolis, G. and Stephen, C. R.: Chlorpromazine: a laboratory and clinical investigation, *Anaesth.* 16: 829 (Nov.) 1955.
5. Dundee, J. W.: Chlorpromazine and liver function, *Anaesthesia* 12: 215 (Aug.) 1957.
6. Sadove, M. S.: Promethazine in surgery. Preliminary report, *J.A.M.A.* 162: 712 (Oct. 20) 1956.
7. Loyn, W. C. C.: Promethazine in general anaesthesia. *Brit. J. Anaesth.* 28: 126 (March) 1956.
8. Chang, J., MacCartney, H. H., Graves, H. B.: Clinical experience with Fluothane, a new non-explosive anaesthetic agent. *Can. Anaes. Soc. J.* 4: 187 July, 1957.
9. Hudon, F., Jacques, A., Clavet, M.: Clinical observations on Fluothane, *Anaesthesia*, *Can. Anaes. Soc. J.* 4: 221 July, 1957.
10. Stephen, C. R., Grosskreutz, D. C., Lawrence, J. H. A., Fabian, L. W., Bourgeois-Gavardin, M. and Coughlin, J.: Evaluation of Fluothane for clinical anaesthesia, *Can. Anaes. Soc. J.* 4: 246, July, 1957.
11. Burn, J. H., Epstein, H. G., Feigan, G. A. and Paton, W. D. M.: "Fluothane": a Report to the Medical Research Council by the Committee on non-explosive anaesthetic agents, *British Med. Jour.* P. 479, Aug. 31, 1957.
12. Brindle, G. F., Gilbert, R. G. B. and Millar, R. A.: The use of Fluothane in anaesthesia for neurosurgery, *Can. Anaes. Soc. J.* 4: 265, July, 1957.
13. MacKay, I. M.: Clinical evaluation of Fluothane with special reference to a controlled percentage vaporizer, *Can. Anaes. Soc. J.* 4: 235, July, 1957.
14. Dundee, J. W., Linde, H. W., Dripps, R. D.: Observations on Trifluoroethylvinyl ether, *Anaesthesiology* 18: 66, Jan.-Feb., 1957.
15. Slater, H. M.: The use of trifluoroethylvinyl ether (Fluoromar) in anaesthesia for dentistry, *Can. Anaes. Soc. J.* 4: 5, Jan., 1957.
16. Sadove, M. S., Balagot, R. C., Linde, H. W.: The effects of Fluoromar on certain organ functions, *Anaesth. & Analg.* 36: 47 (July-Aug.) 1957.
17. Houde, J., Hudon, F., Jacques, A.: Neraval, *Can. Anaesth. Soc. J.* 4: 43, Jan., 1957.
18. Gale, A.: Recovery from Thiopental and Methitural — Nitrous Oxide Anaesthesia for a standard short procedure, *Anaes.* 18: 573, July-Aug., 1957.
19. Percy, W. C., Knott, J. R., Bjurstrom, R. O.: Studies on nitrous oxide, Meperidine and Levallorphan with Unipolar Electroencephalography, *Anaesthesiology* 18: 310, Mar.-Apr., 1957.
20. Adrian, J. J. and Phillips, M.: Use of the endotracheal cuff: Some data pro and con, *Anaesthesiology* 18: 1, Jan.-Feb., 1957.
21. Foldes, F. F. and McNall, P. C.: 2-Chloroprocaine: New local anaesthetic agent, *Anaesthesiology* 13: 287 (May-June) 1952.
22. Dogliotti, A. M.: Trattato di Anestesia, Union tip. ed. t. Torinese, 1935.
23. Bonica, J. J., Backup, P. H., Anderson, C. E., Hadfield, D., Creppo, W. F., Monk, B. F.: *Anaesthesiology* 18: 723 (Sept.-Oct.) 1957.
24. Lund, P. C. and Stephen, C. R.: Personal communications.
25. Appgar, V.: Pudendal Block: Two new techniques, *Anaesth.-Analg.* 36: 77 (Jan.-Feb.) 1957.
26. Gardner, W. J.: The control of bleeding during operation by induced hypotension, *J.A.M.A.* 132: 572, 1946.
27. Griffiths, H. W. C. and Gillies, J.: Thoraco-lumbar splanchnicectomy and sympathectomy, anaesthetic procedure, *Anaesthesia* 3: 134, 1948.
28. Sadove, M. S., Wyant, C. M. and Gleave, G.: Thimethaphan Camphorsulfonate (Arifonad) in general surgery, *Arch. of Surg.* 68: 779 (June) 1954.

29. Committee upon deaths associated with anaesthesia: cases in which hypotension had been used. *Anaesthesia*, 8: 263, 1953.
30. Little, D. M., Sr.: Controlled hypotension in anaesthesia and surgery. Thomas, 1st ed., 1956.
31. Bromage, P. R.: Hypotension and vital capacity: *Anaesthesia* 11: 139 (April) 1956.
32. Laborit, H., Huguenard, P., *Pratique de l'hibernotherapie en chirurgie et en medecine*, Masson, Paris, 1954.
33. Bigelow, W. G., Lendsoy, W. K., Harrison, R. C., Gordon, R. A. and Greenwood, W. F., Oxygen transport and utilization in dogs at low body temperature. *Am J. Physiol.* 160: 125 (Jan.) 1960.
34. Anderson, Sheila, McKissock, W.: Controlled hypotension with Arfonad in neurosurgery. *The Lancet*, 754 (Oct. 10) 1953.
35. Albert, S. N., Spencer, W. A., Eccleston, W. J., Sr., Skibuga, J., Albert, C. A. and Thistlewaite, J. R.: The utilization of moderate hypothermia as an adjunct to general anaesthesia for extensive surgical procedures. *Anaesth. Analg.* 35: 570 (Nov.-Dec.) 1956.
36. Solomon, N. A., Spencer, W. A., Boling, J. S., Thistlewaite, J. R.: Hypothermia in the management of the poor risk patient undergoing major surgery. *J.A.M.A.*, 163: 1435 (April 20) 1957.
37. Knocker, Phyllis: Effects of experimental hypothermia on vital organs. *The Lancet*, 837 (Oct. 22) 1955.
38. Brewin, E. G., Nashat, F. S. and Neil, E.: Acid-base equilibrium in hypothermia. *Brit. J. Anaesthesia* 28: 2 (Jan.) 1956.
39. Editorial: Experimental deep hypothermia. *The Lancet*, 489 (Sept. 4) 1954.
40. Kenyon, J. R. and Ludbrook, Hypothermia below 10 C in dogs. *The Lancet*, 171 (July 27) 1957.
41. Knutson, R. C., Tichy, F. Y. and Reitman, J. H.: The use of electrical current as an anaesthetic agent. *Anaesthesiology* 17: 815 (Nov.-Dec.) 1956.

Hospital Clinical Luncheons

General Hospital — 1st and 3rd Thursday of every month.

St. Boniface Hospital — 2nd and 4th Thursday of every month.

Misericordia Hospital — 2nd Tuesday of every month.

Grace Hospital — 3rd Tuesday of every month.

Children's Hospital — 1st Friday of every month.

Victoria Hospital — 4th Friday of every month.

Municipal Hospitals — 4th Friday of every month.

Deer Lodge Hospital — 1st or 2nd Monday of every month.

St. Boniface Sanitorium — twice a year.

Abstracts from the Literature

Congenital Cardiac Disease and Asplenia. Lyons, W. S., Hanlon, D. G., Helmholtz Jr., H. F., DuShane, J. W., Edwards, J. E.; *Proc. Mayo Clinic*, 32, 11, 277-286, May, 1957.

A study has been made of seven cases in which the combination of congenital cardiac disease and asplenia was present. Given an infant with congenital cardiac disease who is polycythemic and whose peripheral blood shows numerous Howell-Jolly bodies, the diagnosis of asplenia may be made with confidence. The prognosis for patients with this syndrome in general is extremely poor. An exceedingly complicated anomaly of the heart and great vessels may be predicted and it may be expected that the chances of benefit from either corrective or palliative surgical procedures are slight.

A. G. Rogers.

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Association Page

Reported by M. T. Macfarland, M.D.



Registrar's Report

Mr. President and Members of Council:

This is the 86th Anniversary of the Medical Board of Manitoba and the 71st Annual Meeting of Council. An attempt has been made to verify the above statement.

On May 3rd, 1871, the first Manitoba Legislature passed "An Act Relative to Medical Practitioners in this Province" and established the Provincial Medical Board of Manitoba. The First Register included 49 names (Toronto 19, McGill 10, Queen's 7, Edinburgh 2, Glasgow 2, England 2 and U.S.A. 4). On February 28th, 1877, "An Act Respecting the Medical Profession" incorporated the College of Physicians and Surgeons of Manitoba, and indicated that the affairs would be managed by the Medical Board of Manitoba. The first President of the College was Dr. James Spencer Lynch.

In 1882, there were 92 doctors in the province for a population of approximately thirteen thousand. The Medical Board carried on the business until the Council was established on May 28, 1886. According to available recorded Minutes, the first meeting of Council was held at the Historical Society's Rooms, at 3 p.m. on October 13, 1886.

The following are highlights of yet the busiest year, October 1956 - September 1957:

Office space and staff—through the efforts of the Liaison Committee, additional space was finally made available and the move to 601 was carried out on July 31st. No extensive remodelling has yet been undertaken, some equipment has been purchased and more will probably be obtained in the new year. Misses Lorna Zawadzki and Erna Peters have co-operated splendidly in assisting the Registrar. Periodic lists of registrations were distributed as were additions to the Register, dated May 31st.

Through the generosity of the College, the Registrar was enabled to attend the Meeting of Registrars at Edmonton in June. An informal interchange of ideas is valuable. No meetings of the Defence Medical and Dental Services Advisory Board were called but the Registrar has been invited, as a member of the latter body, to attend the Canadian Conference on Nursing to be held in Ottawa on November 4th and 5th, and the physicians and dentists Indoctrination Course in Civil Defence at Arnprior at a later date.

The Manitoba Cancer Relief and Research Institute Board activities were diminished until dissolution and replacement by the Cancer Treatment and Research Foundation. Nominations to the Medical Advisory Committee of the new organ-

ization have been forwarded to the Minister.

The College now holds membership in the Better Business Bureau and in the Winnipeg Chamber of Commerce and has accepted the invitation of the Federation of State Boards to become an Associate Member. Meetings of the Board are usually held in February, in Chicago.

In addition to the annual lecture which he has given to members of the fourth year, Faculty of Medicine, the Registrar was invited to undertake the lecture on Medical Ethics previously given by one of the honoured senior members of the profession.

Meetings

From October 1st, 1956 to September 30th, 1957, the following meetings have been held:

- 1 special meeting of Council on May 25th.
- 6 meetings of the Executive Committee, 4 prior to and 2 subsequent to the May meeting of Council.
- 11 meetings of the Registration Committee, 8 prior to and 3 subsequent to the May meeting of Council.
- 1 meeting of the Education Committee, prior to the May meeting of Council.
- 1 meeting of the Finance Committee subsequent to the May meeting of Council.
- 1 meeting of the Legislative Committee prior to the May meeting of Council.
- 1 meeting of the Legislative Committee of Fifteen prior to the May meeting of Council.
- 1 meeting of the Discipline Committee prior to the May meeting of Council. (1 in October).
- 3 meetings of the Fee-Taxing Committee, 1 prior to and 2 subsequent to the May meeting of Council.
- 3 meetings of the Specialist Committee, 2 prior to and 1 subsequent to the May meeting of Council.
- 3 meetings of the Internship Committee, all prior to the May meeting of Council.

This is a total of 32 meetings held during the year as compared with 19 the previous year. Minutes for these meetings have been distributed to Council members.

Student Registration

Fifty-nine applications were accepted for student registration as compared with sixty-six for the previous year.

Enabling Certificates—Total 82 (same as last year):

Fifty certificates were issued to University of Manitoba graduates or student registrants, 9 were issued to Manitoba registrants, chiefly U.K. graduates, and 23 to graduates from other schools—in Canada, 4; United Kingdom, 1; U.S.A., 3; Europe, 11; and Asia, 4. All documents were available to the Registration Committee and 38 applications

Presented by Dr. M. T. Macfarland at the Annual Meeting of the College of Physicians and Surgeons of Manitoba on November 2nd, 1957.

were deferred. 18 applicants were interviewed and several others to whom Enabling Certificates were granted are yet to be interviewed.

Two Enabling Certificates issued more than two years ago but not used were renewed.

Seventeen applications from Hungarian physicians were considered by the Credentials Committee on March 15th and June 27th. Of these 2 were considered to be qualified in the Basic Sciences subjects, and the remaining 15 were required to write all examinations. 3 others are pending consideration by the Credentials Committee of the University of Manitoba. In this connection the Committee acknowledges the co-operation of previous registrants who are familiar with the language of the newcomers and have acted as interpreters. The Documentation fee has been deferred but will be collected before the Enabling Certificate is issued.

A motion passed at the December 5th, 1956 Registration Committee meeting, stipulates that all applicants for Enabling Certificates be considered by the Registration Committee prior to referral to the Credentials Committee of the University of Manitoba for assessment in the Basic Sciences subjects.

The Winnipeg hospitals would appreciate rapid assessment of documents by the College before undertaking to provide internship appointments.

Certificates of Licence (Temporary)

Thirty-two Certificates of Licence (Temporary) have been issued, which is two less than for the same period last year. The schools in which applicants qualified were University of Manitoba, 13; other Canadian, 10; United Kingdom, 7; European, 1; and New Zealand, 1. The majority of certificates, 14—were issued to hospital internes, 9 to members of the Armed Forces, 4 to employees in Government service, 4 for those serving as Locum Tenens for another physician and 1 for combined hospital interne and Locum Tenens. 19 were issued to residents of Greater Winnipeg, while 13 were outside that area. During the year 31 Certificates of Licence have been cancelled and 3 were extended. Of these, 10 who previously held Certificates of Licence (Temporary) converted them to permanent registration. Of a total of 288 Certificates of Licence issued since the 1947 amendment to the Act became effective in 1948, the number valid at September 30th, 1957 was 50.

A study was made by a special committee of problems posed by temporary licensure, and recommendations will probably be made to Council.

Certificates of Registration

96 Certificates of registration were granted, which is 2 more than for the same period last year. At the time of registration, 34 (which is 35%) were graduates of the University of Manitoba, 8 of other Canadian Universities, 7 from U.S.A. Universities, 35 were from the United Kingdom (which is 1 more than Manitoba graduates registered this year), 7 from Europe and 5 from Asia. Of these,

46 settled within and 27 outside the Greater Winnipeg area, while 23 have not practised in the Province. At the end of the current year, 3 of 1957 registrants had moved from the province.

A new registration form is in use—it does not contain the qualifications on which registration was granted, but merely states that the holder is entitled to practise Medicine, Surgery and Midwifery. The signatures of the President and Registrar are affixed and space is provided for that of the recipient. Mention should be made that Old English lettering is done by our own artist Miss Lorna Zawadzki, who has improved her shining hours by attendance at night classes.

There was one erasure from the Medical Register of the province. Number of licensed medical practitioners in Manitoba 1947-1956:

Year	Outside		Total
	Winnipeg	Winnipeg	
1947	503	226	729
1948	511	236	747
1949	528	233	761
1950	546	229	775
1951	564	235	799
1952	573	241	824
1953	604	260	864
1954	659	253	912
1955	712	262	974
1956	695	266	961

The figures for September 30, 1957 are as follows:

	Permanent	Temporary	Total
Greater Winnipeg	692	31	723
Outside Winnipeg	255	18	273
Totals	947	49	996

The above figures compare advantageously with those listed in the Survey of Physicians in Canada, 1954, published by the Research Division, Department of National Health and Welfare, Ottawa, which lists "active" physicians for the years as follows:

1947	754
1948	745
1949	723
1951	776
1954	799

Although the Ottawa figures were based on a questionnaire circulated to all Canadian doctors in 1954, medical graduates for that year were not included. It would appear that the number of physicians available in this province is adequate for existing needs.

Population ratio:

1951—776,541 divided by 799—1 for 972 persons

1954—828,000 divided by 912—1 for 908 persons

Final figure for:

1956—850,040 divided by 961—1 for 885 persons

The total number of registrants on the Manitoba Register is approximately 1,950, or nearly double the number of registrants actually engaged in medical work in the province.

Specialist Committee

Of a total of 34 enrolled during the year, 22 had Royal College of Canada Fellowship or Certification. Of 17 applications considered at 3 meetings of the Committee, 6 were accepted for enrolment on the Specialist Register, 6 were granted registration conditional upon the successful completion of the Royal College qualification, 5 were deferred and 1 application is pending.

A documentation fee is now payable by all applicants who have not Fellowship or Certification with the Royal College of Physicians and Surgeons of Canada.

The Manitoba Medical Service Manual indicates that "Specialist status may be accorded to physicians whose names appear on the Specialist Register of the College of Physicians and Surgeons of Manitoba."

Life Membership — October 1, 1956 - September 30, 1957:

Bardal, Sigurgeir — Shoal Lake
Lougheed, Morley Semmens — Winnipeg
McGuinness, Frederick Gallagher — Winnipeg
McPhail, Harry Percival — Grand Beach
Rutherford, William Gordon — Winnipeg

Three reside in Winnipeg and two in Rural Manitoba.

Changes in the Register

We are reminded of the losses there have been by death during the year. The names of the deceased members have been read and include from Greater Winnipeg, 9; Rural Manitoba, 2; and outside the province, 3 — making a total of 14.

Additions to the Register and changes in address numbered approximately 436 while inquiries received from all applicants for Enabling Certificates, Certificates of Licence (Temporary) and Certificates of Registration was 575.

Several physicians inquired about locations and in the majority of instances the inquirers were put in touch with available openings. Few desirable openings remain unfilled for any length of time.

Annual fees outstanding on September 30, 1957 are Winnipeg 4 and rural Manitoba 3, making a total of 7. Not one name has been erased from the Register during the past 10 years for non-payment of annual fees.

The use of the M.M.S. Board Room for the Annual Meetings of the College of Physicians and Surgeons of Manitoba is greatly appreciated.

Obituaries

Dr. Frank Herbert Clark

Dr. Frank Herbert Clark, 69, of Reston, died on October 6. He graduated from Queen's University in 1914, came to Reston the following year and practised continuously there. He was appointed coroner in 1919, was C.P.R. doctor for many years and health officer for the Municipality of Albert. He served on the Parks and School Boards, was an active sportsman and a Mason.

He leaves a widow, two sons and a daughter.

Dr. Hugh F. Cameron

Dr. Hugh F. Cameron died in Winnipeg on September 30, aged 52. Born at Glace Bay, Nova Scotia, he moved to Winnipeg at an early age. He graduated from University of Manitoba in Medicine in 1931. Following two years of post graduate study at Royal Victoria Hospital, Montreal, he gained his FRCS in 1934 from the University of Edinburgh. He became a Fellow of the Royal College of Physicians and Surgeons of Canada in 1947.

Dr. Cameron was head of the neuro-surgery department of Winnipeg General Hospital, consultant neuro-surgeon at St. Boniface, Children's and Deer Lodge hospitals, and associate neuro-surgeon at Misericordia hospital. He was a charter member of the Board of Trustees of Manitoba Medical Service and on the Council of the Royal College of Physicians and Surgeons (Canada).

He is survived by his widow and two sons, his mother and twin brother.

Dr. Robert Dick Orok

Dr. Robert Dick Orok, 79, former M.L.A. for The Pas, Manitoba, died at Midhurst near Barrie, Ontario on November 9. Educated at Toronto and Queen's Universities he practised first at Cookstown, Ont., then moved to The Pas, which he represented in the legislature 1912-1914. In 1915 he became Medical Officer for the 101st Battalion Winnipeg Light Infantry. In 1918 he went to the Pensions Board at Ottawa. In 1931 he left the Board to become ship's surgeon on the Canadian National Steamship liners to British West Indies and South American ports. He retired in 1940 to Midhurst and is survived by his wife.

Dr. William Turnbull

Dr. William Turnbull, 82, died suddenly on October 10. Born in Brussels, Ont., he came west to teach at Manitou and Boissevain where he was principal of the high school. He graduated from the Medical College in 1904, served as interne at St. Boniface Hospital and practised in Winnipeg. For many years he served as medical officer for the City Health Department. In 1934 he was president of the College of Physicians and Surgeons of Manitoba, a life member of the Winnipeg Medical Society and in 1947 was named Senior Member of the Canadian Medical Association. He loved hunting, curling and horticulture.

His widow, two daughters and a son, David, who was Rhodes Scholar for Manitoba in 1928, survive him.

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C I B A



Editorial

S. Valerub, M.D., M.R.C.P. (Lond.), F.R.C.P. (C.), F.A.C.P., Editor



Means and Ends

The dismal feeling of being bogged down by routine comes to all of us with varying degrees of suddenness when at the end of the year we attempt to take stock of our activities, before we embark upon our New Year's resolutions. Regardless of the nature of our work we begin to compare ourselves to the factory worker in the often retold story, who, having spent 30 years of his life, 8 hours a day tapping bottle caps on the assembly line with a glass rod, was suddenly brought to realize that he did not know the purpose of this act. That the feeling of not knowing "why" may come to physicians, whose work by all standards is eminently purposeful, may be surprising. Yet, it is, nonetheless, true that even doctors often find themselves in a "rut," and badly in need of reassessment and restatement of goals and their approaches — of ends and means.

What are the ends to which the physician has dedicated himself? First, historically, if not foremost in importance, is cure. Healing is the physician's traditional role. The primitive man did not call upon his witch doctor for reassurance or palliation. He expected the doctor to exorcise the demons and effect a cure. Even the modern patient, better acquainted with the limitations of Medicine as he is, often refuses to resign himself to anything short of a complete cure. Cure is the cornerstone of Medicine.

The second goal of the physician, at which he aims only when cure is impossible, is palliation. Most of the doctor's daily routine consists of alleviation of symptoms, reassurance and tiding patients over crises—all palliative measures. Much of what passes for cure is in reality palliation. Cancer surgery is usually palliative, as is much of medical therapy aimed at "control" rather than eradication of disease. Palliation will remain an important medical goal, pending, of course, the Medical Millennium when a cure will be found for every disease.

This brings us to the third medical target—prevention. Curiously, prophylaxis is a relatively recent arrival in Medicine. True, hygiene was practiced in ancient Israel and in Roman army camps, but in neither case did the doctors have much to do with it. It is only with the advent of modern bacteriology, immunology and the science of nutrition, that prophylaxis has come into its own. It has now taken firm possession of the medical imagination, which no longer dreams of Aurum Potabile and Universal Serum to cure all afflictions, but of prevention of cancer and de-

generative heart disease. In the long-range global evaluation prevention has taken precedence over cure.

The fourth aim of the physician does not lend itself to a ready definition. It can be best understood by inference from the definition of health given by the World Health Organization. "Health" . . . states the constitution of WHO . . . "is a state of physical, mental and social well-being, and not merely the absence of disease or infirmity."

Should the physician accept this definition with its implications, he would add to his numerous responsibilities many new ones. He would assume the functions of a social worker, political reformer, father confessor, legal adviser, soothsayer, mediator, entertainer and guardian angel. The goals are patently overambitious, and may even border on the utopian.

Some doctors are reluctant to play along with these new demands and continue to limit their interest to the old-fashioned triad of diagnosis, prognosis and treatment. Others have accepted, at least, in part some of the new responsibilities and are actively participating in health foundations, child guidance clinics, advisory boards, lay education committees, and, on a more personal level, the guidance of the personal affairs of their patients. The mantle of new responsibilities has been thrust upon the doctor by the demanding public, and willy-nilly he must wear it with grace and dignity.

Having oriented himself with regard to ends, the reflecting physician may now wish to give a passing thought to means, which lead to these ends. Means are important, not only in their own right, but also because they modify the ends to which they lead. Different means leading to the same ends are not analogous to different paths leading to the same destination. The latter are static, whereas means are dynamic and influence and modify the ends which they set out to fulfill. Noble political and social aims are often distorted beyond recognition by ignoble measures that had led to their attainment.

This relationship between means and ends is doubly important in Medicine, for here it is often necessary to compromise with the principle that "means justify the ends." A painful operation may be required to effect a cure, a reassuring lie may be necessary to sustain a patient's morale. Yet, while few will dispute the necessity of this compromise for the "ultimate" good, most will agree that a cynical disregard of means will lead to undesirable results. An overly rigid control of a diabetic at the risk of causing an obsessive neurosis, a strict supervision of a cardiac at the price of cardiac crippledom, a prefrontal lobotomy with the certainty of a blunted personality are but a few

examples of the pernicious moulding of ends by means.

To avoid these pitfalls and attain his goal by a fine adjustment of ends to means is the uneasy task of the physician. The therapeutic tightrope is thin and the balance precarious.

Having restated his goals, and regained perspective, the physician, no longer perplexed, will find broader meaning and deeper significance in his achievements in the year that is passing and renewed hope and inspiration for the year ahead.

Ed.

Letter to The Editor

Dear Sir:

Never having been at the Cook County Graduate School of Medicine I found Dr. R. E. Helgason's account of his recent sojourn there, as reported in the November issue of the Review, very interesting . . . but also very disturbing. Surely the quoted remark of a staff man at the institution "that the women in labor at Cook County Hospital are in general the most frightened in the world" cannot be true of a centre giving postgraduate training in the gentle art of Obstetrics? Since Grantly Dick Read has recently been on this continent, one wishes that a marriage of principles and precepts could have been arranged between his extreme views on "natural childbirth" and the apparent assembly-line procedures of the Cook County Hospital as related by Dr. Helgason.

Surely the routine use of pitocin solution intravenously "in normal labors" is an unnecessary and undesirable expediting of labour which is not excusable nor safe even in the face of an acute

shortage of maternity beds? Surely the use of mid-forceps under no other shock-reducing and pain-killing agents than pudendal block and pre-delivery analgesia is not to be countenanced in these enlightened days of obstetrical anaesthesia? Surely the potentially hazardous procedure of curetting a pregnant uterus deserves more anaesthetic coverage than that obtained by "nembutal, morphine and scopolamine," unless one wishes to return to the inhumane practices of the Russian abortion clinics of twenty-five years ago?

I am sure that Dr. Helgason speaks truly when he says "The knowledge I gained will help me to deal with my obstetrical problems in rural practice," but in the interests of the maternal and infant welfare of our Province, let us hope that he will temper his new knowledge with judgment and mercy.

Yours very sincerely,

Elinor F. E. Black.

Victorian Order of Nurses

A plea for the old fashioned virtues and standards in nursing has been made by Brigadier John Crawford, M.B.E., Director General of Treatment Services for D.V.A. and one of the chief Canadian heroes after the tragic capture of Hong Kong at Christmas 1941.

Brigadier Crawford, speaking to the annual meeting of the Victorian Order of Nurses in its Jubilee Year, mentioned his concern over what seems to be a new trend in the attitude of nurses toward their profession. "Medically speaking," he said, "I grew up at a time when good bedside nursing was one of the mainstays of treatment. Nurses were proud of the fact that they, and only they could provide the sort of care which did so much toward saving the lives of their patients. Times seem to have changed somewhat. More and more products of our schools of nursing seem to

be turning their backs upon this worthy and traditional role. Many nurses are devoting their talents nowadays to working as nurses in offices, in industry, or as airline hostesses, for example, but the business of bedside nursing seems to be becoming less attractive to those best qualified to carry it out." Dr. Crawford concluded: "It is therefore a matter of much comfort to me to look at the Victorian Order of Nurses and see in it a group of nurses dedicated to the ideals of nursing which I hold to be important."

The Department of Veterans' Affairs in 1946 made a contract with Victorian Order of Nurses for Canada. Veterans, both men and women come under the plan, but not members of the veteran's family. Authority for the nursing service comes from the local Veterans hospital or office of D.V.A. Last year nurses in the Winnipeg branch V.O.N. made 849 visits to veterans in their homes.

Book Reviews

The Patient Speaks. Harold A. Abramson, M.D., Vantage, 237 pp.

The acceptance of formal psychotherapy as a recognized and useful procedure has as yet not been accepted by all medical practitioners. Part of the reason is that the idea of it as a definitive treatment is so far removed from so many of the usual medical procedures. This leads to a feeling that psychotherapy is either an esoteric, understandable process, or a catering to the self indulgence of the wealthy. This, in spite of the fact that there is no medical practice without psychotherapy. Books like this bring the procedures into better focus. This book is a verbatim account of what went on in a number of psychotherapeutic interviews. Only the material relevant to the patient's relations with her mother is included. This topic was chosen because it was the significant one in the patient's illness. Publishing all the interviews verbatim would have been too cumbersome.

This book should gain further respect in the eyes of the profession at large by virtue of the fact that the writer is a person well grounded in general medicine, being trained in medical disciplines other than psychiatry.

The whole book is written in non-technical language and is addressed to the non-professional as well as the professional reader. The foreword by Dr. Freemont Smith, director of Josiah Macy Junior Foundation, serves as a brief introduction into the mind body relationship from the psychoanalytical point of view. A clear and simple description of psychoanalytic psychotherapy is given by the author on page 30. Among other things, the book itself attempts to give "some insight into the difficult process of ego reconstruction through psychoanalytical technique." This book is well worth reading for anyone curious about psychotherapy. It also offers an additional psychological formulation for asthma, other than the one generally described.

J. M.

Histology. Arthur Worth Ham, M.B., F.R.C.S., Professor of Anatomy, in charge of Histology, in the Faculties of Medicine and Dentistry, University of Toronto; Head of the Division of Biological Research, Ontario Cancer Institute, Toronto, Ontario, Canada. Cloth Binding, 3rd edition, pp. 894, with 582 illustrations (diagrams, electron and photomicrographs) and 8 color plates. J. B. Lippincott Company, Philadelphia and Montreal, 1957.

During the last ten or fifteen years, the outlook of histologists has changed. From being largely a matter of description, histology is now a highly

dynamic subject, and the merely morphological concepts of the classical histologists are gradually being converted into a dynamic histology. For instance, modern techniques demonstrate as never before how the various cell types in the seminiferous tubules of the testis transform continuously from one stage to the other. Again, in the epidermis there is a continuous renewal of cells by mitosis and transformation into various cellular stages, until they are desquamated from the surface. Mitochondria are not mere granules in the cytoplasm, but are intricate chemical factories, amongst the most important components of the cell. This change to dynamic histology, and the development of new technical tools, such as the phase contrast and electron microscopes, histochemistry, etc., have opened up new fields of investigation, and during recent years have resulted in an enormous amount of new information. A few years ago, Dr. A. W. Ham, one of the leading Canadian histologists and histopathologists, gave us, in a precise and understandable manner, an excellent presentation of modern histological work. Dr. Ham's own experience in electron microscopy and experimental tumor pathology helped enormously in the evaluation of the various data.

If one looks back over the three editions of Ham's "Histology," one realizes the great progress made during the last seven or eight years. Whereas many textbooks are often years behind, Dr. Ham's book is in every field up to date, and none of the more important advances has been overlooked. Added to the third edition is a chapter dealing with the techniques and advances in electron microscopy. Many of the electron micrographs originated in Dr. Ham's laboratory, and very often this textbook is the first publication of the electron microscopic study of certain organs and tissues. In addition to the electron micrographs (59), where feasible the light microscopic structure of tissues and organs is illustrated by a large number (416) of individual photomicrographs which in histology are definitely preferable to the drawings used to illustrate many other textbooks. The chapters on histological techniques and methods of morphological study are extremely useful; usually in the histology course not enough time can be allotted to these subjects. In addition, Dr. Ham's easy style renders the book very pleasant reading, and the various chapters are not mere dry descriptions, but agreeable and often fascinating narratives. In all, this book is more than a textbook for students; it is also a valuable reference book of histology, with excursions into pathology and embryology, for those engaged in any branch of medicine.

F. D. B.

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Social News

Reported by K. Borthwick-Leslie, M.D.



No enthusiasm, no eternal back seat heckling, no Gordon to keep me on my toes as to deadline. How I will miss that little guy. Ten days ago he chases me with "Come on Katie, up and at 'em with something really snappy for the Xmas and New Year's issue." So here we go—in spite of last weekend's grim and depressing events—re Dr. East, my secretary's mother and Gordon all signing out. I guess we should remember that the Bombers did win and are on their way to the Grey Cup. The weather stays but good, and the festive season does approach.

Dr. Charles F. Code, '34 co-chairman of the section of Physiology at the Mayo Clinic in Rochester and professor of Physiology in the Mayo Foundation Graduate School, University of Minnesota, has been elected to the senate in the University of Minnesota in Minneapolis. Dr. Code will represent faculty members of the Mayo Foundation in the University Senate.

Congratulations to Dr. A. C. Abbott re the research grant from the Banting Research Foundation for medical research in Canada, valued at from \$600.00 to \$2000.00. Am not informed as to the amount for Manitoba.

Unfortunately, I was unable to contact erstwhile Major Allen M. Davidson, '46, R.C.A.M.C. while he was in town, but am certainly tickled pink at the official recording of his promotion to Lieutenant Colonel as commanding officer of Whitehorse Military Hospital. He has just returned from the Middle East. Getting around, Al!

Dr. Mindel Sheps, '36 has been appointed Assistant Professor of Preventive Medicine at Harvard University. Dr. Sheps will be responsible for consultation and teaching in biostatistics in the Harvard Medical School. I wonder how many remember the famous farewell banquet at the Children's Hospital when Mindel was leaving to marry Cecil Sheps. Good party, if I did organize it.

Dr. Franklin J. Squires, '44, in March 1957 received the degree of M.Sc. in Surgery from the University of Minnesota.

Dr. Ralph Z. Levene, '50, also in June 1957 received the M.Sc. in Surgery from New York University.

Dr. Gerald Courshey, '50 from the University of Minnesota, July 1957 received the degree of Master of Science in Surgery.

N.B.—Elsewhere in the Review, I believe all members, associates, contacts, grandparents, etc. are beseeched to report the names, addresses, degrees, etc., of all important offspring of important graduates, male, for the use of ???. What about the female graduates? Surely some of us gals have

produced some famous ones! Granted some of our earlier grads were spinsters, but no more, for instance Dr. Joan Hollenberg (Mrs. John L. Goble) daughter of Drs. Dorothy and Joseph Hollenberg, and husband are at the Columbia Presbyterian Medical Centre in New York, where they have a three-year fellowship. Come on, gals, up and at 'em and report. My own, of course famous, but with enough sense to be Engineering instead of Medicine. Let's not be small about this, male or female, write in to the M.M.A. please.

Dr. Arthur M. Brown, '56, on a Clinical Fellowship for post graduate work at Presbyterian Hospital, New York, has also been teaching at Columbia University.

Dr. and Mrs. (Dr. Emma) Gilbert Adamson announce the engagement of their only daughter, Cynthia Josephine, to Mr. Martin Hurst Ainley, Huddersfield, England. The wedding will be Dec. 18th in St. Paul's Church, Fort Garry, at 3 o'clock.

Dr. and Mrs. Harry Medovy announce the engagement of Elinor Ruth to David Lyon Rothberg, Melfort, Sask. The wedding to take place December 29th in the Shaarey Zedek Synagogue.

November 19th, marriage vows were exchanged between Marilyn Ann Atkinson and Davidson Craig Fairbairn, son of Dr. and Mrs. L. M. Fairbairn, Calgary.

To the last of the 1957 newcomers, welcome. Dr. and Mrs. Gordon Boyd, a son, Franklin Leslie, at John's Hospital, Baltimore, Maryland, November 19th.

Dr. and Mrs. Caminetsky, Niagara St., announce the birth of Michael Ira, October 27, 1957.


Dr. and Mrs. Stanley Rooney, Valleyfield, Que., announce the arrival of Michael Stanley, Nov. 18th.

Dr. and Mrs. Walter Fox, Louisville, Kentucky, announce the arrival November 10th, 1957 of their second adopted daughter, Jennifer Colleen.

Dr. and Mrs. Marvin Lee Stern, Mahnomen, Minnesota, happily announce the birth of Deborah Anne Gwen, November 13th, 1957 at the Maternity Pavilion, Winnipeg.

Dr. and Mrs. S. Stedman announce the birth of Neil Sherman, October 30th, 1957. Brother for Sheryl Leigh.

Signing off for 1957 . . .
Happy festive season and a wonderful 1958 to all.




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Surgery

Pilonidal Sinus

D. R. Webster, M.D.

Pilonidal sinus is a disease of young adults and common enough to be a concern of every practitioner. In the Royal Victoria Hospital, in the past 10 years, over 400 cases have been operated upon. The results in the long run are good, but there is no denying that many discomforting and disabling periods have accompanied the treatment.

It is possible that the difficulty in management and the cause of morbidity are due to the practice of considering that all cases are in the same category and that they all represent a uniform condition, requiring uniform treatment. It is possible that there is more than one etiological factor and that appropriate treatment depends on the amount and character of involvement present. I cannot accept the view that all are traumatic and that none arise from some form of dysplasia.

Let us look at some of the views on pathogenesis:

I. Embryological or congenital fistula. It is suggested that this may be due to two agencies:

1) Persistence of a vestige of the neuro-enteric canal. This is a difficult theory to prove, but there are features that suggest this to be a real entity.

2) Many of our cases have been found on x-ray to have also a spina bifida. One such case died of meningitis following excision of a pilonidal sinus. Another patient had two recurrent bouts of meningitis where a coliform organism was recovered from the spinal fluid. Following careful excision of a sinus in the usual site of a pilonidal sinus, no recurrence has taken place in the past ten years.

Other types of congenital lesions have been noted with spina bifida or hemi-vertebra, such as mediastinal cysts and duplication of the intestine.

3) **The post-anal dimple.** The dimpling of the skin in the natal cleft has been held to be due to adherence by dense collagenous fibres to the fascia overlying the dorsum of the sacrum and coccyx. It is suggested that contraction of these fibres pull the skin inwards producing invagination of epithelial lined sinuses with hair follicles eventually isolated from the surface. At the Charity Hospital, New Orleans, one surgeon has started a long-range programme. He excises the dimple in new-born infants and will follow these to see if any develop pilonidal sinuses in later life.

The presence of cysts lined with epithelium and the presence of hair suggest, of course, a simple explanation that these are due to developmental defects and that ectodermal tissues destined to be skin became isolated in the subcutaneous tissue. Since the cavity of the cyst may communi-

cate with the exterior it may become a portal of entry for infecting organisms.

II. Trauma.

It is a common observation that pilonidal sinus occurs in young adults, usually of stocky build with a generous distribution of hair. They are frequently of dark colouring, muscular, with firm buttocks. It is more frequent in males, who ordinarily are more prone to trauma than females.

The presence of hair in the pilonidal sinus, from whence comes its name, is fascinating. Does it grow there, and is it only an incidental finding? Does it act as a foreign body forming a granulomatous reaction, or are the hairs forced under the skin, as in the interdigital cleft of barbers? Stiff hair can be broken, and these ends, by some trauma such as jolting or manually by the use of toilet paper, carry infection into the region.

It is true that no sections have been reported showing hair growing out of true follicles and cases have been described with the distal portion of the hair pointing into the lumen of the sinus. On the other hand, we have seen large masses of hair present in the cysts, often curled upon itself and when opened out measuring 3" in length. It would seem most unlikely that any such length of hair could have threaded its way into the area, and it is easy to believe that at some time the hair must have been growing there and later become detached from its follicle.

The sinus is not necessarily situated in the midline, but one or more may open to one side or the other of the midline and even extend far upward in the lumbar region.

Ordinarily the anal cleft is walled off by fascia adherent to the coccyx below and the lumbar region above and laterally is continuous with the fascia of the buttocks with septa extending to the gluteal fascia. When infection is limited to this area simple drainage is often sufficient, but, if it has broken through the fascia with projections into the buttock fat, it is indeed difficult to eradicate the infection.

The epithelial lined tract may extend only a short distance but at times it may be long and branching. If this or these tracts are not completely removed, recurrence will probably follow. In some cases it is advisable to have the pathologist make quick sections to ensure that the tract has been completely excised.

Diagnosis

This seldom offers much difficulty, although anal fistulae, pre-sacral dermoids, abscesses and carbuncles, osteomyelitis of sacrum and coccyx must be eliminated. Occasionally it is impossible to differentiate an anal fistula until after surgical exploration.

Treatment

It is possible that any one, or a combination, of the suggested etiological agencies may be responsible for the clinical syndrome we recognize under the term "infected pilonidal sinus or cyst."

The first symptoms of which the patient usually complains are pain and swelling at the base of the spine, which on examination shows signs of abscess formation. The surrounding tissues are usually indurated but frequently not very tender. In the majority of cases this is very superficial, and simple incision, removal of any foreign material such as hair or debris, packing open or otherwise establishing drainage, will effect a cure. The patient must be instructed to return for dressings with maintenance of drainage until healed.

About two years ago the 16-year old daughter of one of our staff men was referred because of a recurring abscess on the left buttock about 2" from the cleft. We found here a shallow cavity full of hair and a superficial epithelial lined sinus extending to the midline. Simply laying open the tract, removal of the hair and excision of the wall, with incomplete closure to allow drainage effected a complete cure.

We all can recall many such cases where simple excision on one or more occasions has led to apparent cessation of the process.

However, the cases that one sees in hospital are usually those that have had recurring attacks with incision several times and wish to be cured. These are frequently severe, some with multiple sinuses, and such patients are unable or unwilling to carry on their occupation with this disability.

It is this group, whatever the origin, that has caused so much discussion and so much dissatisfaction with surgical treatment and has led to such a variety of technical procedures. Just to list a few:

1. Incision and drainage
2. Excision and healing by second intention
3. Marsupialization
4. Rotation and sliding flaps
5. Excision and primary suture.

The excision of a large block of tissue, packing open the defect, is a very effective method of curing the condition providing the dressings are well done and the superficial bridging of epithelium is

not allowed to occur. However, there are two drawbacks. One is the length of time to heal—perhaps up to three months, and the thin, new skin overlying the defect is not a good protection.

Marsupialization or exteriorization is also a good procedure. It means laying open the cavity, tracing all the tracts leading from it with a probe or grooved dissector and incising these to the surface, cutting away the skin margins so that healing by second intention will occur. If there is epithelium in the depths of the sinus it may take part in the repair of the wound. There are the same drawbacks as with block incision, although the defects are not so marked and healing is not so long delayed.

The use of rotation or sliding flaps has been abandoned in almost every clinic. They necessitate large additional incisions and can lead to further complications.

In our hospital we excise the sinuses, the depth and amount of tissue removed depending on the extent of the disease. The closure depends on the opinion and preference of the operator. Dr. Mason Couper has been exceptionally successful with his cases. His cardinal points are the elimination of infected pockets, the eradication of dead space, meticulous haemostasis and primary suture. The buttocks are strapped together, and the patient nursed on his face for several days. Some other surgeons prefer leaving the wound open for drainage.

In conclusion, I hope that Dr. Klass will continue his observations. It may be that he has the solution to this troublesome condition. If so it should be widely publicized so that these cases will not come to the surgeons with multiple sinuses from widely infected tissue. In the meantime we have to deal with a certain number of these cases complicated by our own or others' mishandling, necessitating radical treatment to cure.

There is one more complication I would like to mention. This was illustrated by a 50-year old male from the Queen Mary Veterans Hospital who had troublesome discharging sinuses beginning in the midline for nearly thirty years. When we saw him, multiple gaping sinuses were found to be squamous cell carcinoma. This is undoubtedly a rarity but it illustrates the necessity of not neglecting a chronic long-standing infection.

VALENTINE DINNER AND DANCE

(Entertainment - Cocktails)

SATURDAY, FEBRUARY 15th, 6.30 p.m.

ROYAL ALEXANDRA HOTEL (Crystal Ball Room - Banquet Hall)

Sponsored by: THE GENERAL PRACTITIONERS' ASSOCIATION OF MANITOBA



Mr. J. Gordon Whitley

The sudden death on November 23 of Mr. Gordon Whitley cast a gloom over the Medical Arts Building where for over twenty-three years he had been business manager of the Manitoba Medical Review. Early in 1934, during the depression, the Review carried little advertising and was a constant expense to the Manitoba Medical Association. Dr. C. W. MacCharles, the editor at that time, negotiated with Mr. Whitley to take over the securing of advertising, and the executive authorized the arrangement.

Under his watchful care the Review has increased in every way so that now it can stand comparison with any provincial or state medical journal. Until very recently he worked in cramped quarters, but nothing affected his cheerfulness and devotion to the best interests of the Review. The Review is his monument.

Ross Mitchell

Presidential Address

The C.M.A. Trail Of 1957

I was born in Manitoba, in a home by the Valley Trail. The Valley Trail means nothing to anyone here and yet it was, for that community a market road, to the south the railroad towns, to the north new homestead lands and the timber reserves.

Along this trail members of the Bunje Salteaux tribe went to and fro to their hunting grounds in the northern portion of the Riding Mountains. Along this trail at the turn of the century I watched many "men in sheepskin coats" tramp over the miles to a new home and a new freedom. The Valley Trail was something and it had a personality, at least it seemed to have for me at the dawn of the 20th century.

My father used to tell me of his many trips in '79, '80 and '81 along the eastern portion of the Carlton Trail, from Fort Garry to Portage, getting stuck at the ford over Rat Creek, on to Shoal Lake where the N.W.M.P. always stopped the wagon train and searched everyone for a hidden bottle. This trail then wound on to Fort Ellice, Fort Carlton, Fort Pitt, Fort Victoria and Fort Edmonton. From here westward to Jasper House, the Yellowhead Pass, the Thompson River, Kamloops, Yale, Hope and Vancouver.

Within the last 20 years my sons and I were to trace many miles of the Carlton Trail, beginning at Edmonton and ending at Lower Fort Garry, down north from Winnipeg. Since 1922 when I first began to practise at Lamont, I have travelled the Victoria Trail to and from Edmonton many hundreds of times. This is a portion of the Old Carlton Trail, still winding in and out and up and down, but with black top on it. With this preamble you might rightly say, "The Western Trails are in his blood."

What has this got to do with the C.M.A. or the Manitoba Division? This for one thing—often along such trails as these came the first Medical Men into our country. Dr. William Butler Cheadle, the first Trans-Canadian tourist, travelled the Carlton Trail with Lord Milton many years ago. He practised medicine as he travelled and what was important for us kept an excellent diary. Dr. Hector was with the Palliser Expedition as it travelled over and surveyed the Western Prairies, adding the Palliser Triangle to our maps. Dr. Grant in the book, "From Ocean to Ocean" refers to the doctor and his activities. Thus pioneer doctors came to us along THE TRAILS.

Here we are today in the city of Winnipeg in the Manitoba Division, and what do we find? History repeating itself, more trails and other doctors associated with them in the stories of yesterday.

Manitoba

Here in Manitoba, in this area now Winnipeg many trails met. It was the cross roads of the West. These routes of travel were a mixture of highways by land and by water. May we note a few of them, up the Red River from Fort Garry to Pembina, down the Red River from Fort Garry to Lake Winnipeg and on to the Bay, up the Assiniboine to Portage and Brandon House, across the prairies to the southwest to the buffalo hunting grounds. It was along trails such as these that the first doctors came to Manitoba.

I have borrowed much of my information from Dr. Ross Mitchell's book "Medicine in Manitoba." I hope you all have read it. In addition to this I am a Native of this Division having spent the first eighteen years of my life 196 miles northwest of here.

Apart from the medicine-men, the first doctors to arrive in what is now Manitoba came by way of Hudson Bay and were Ships Surgeons for the Hudson's Bay Company. The first one mentioned was one Peter Romulus, more correctly perhaps, Pierre Romieux. He was a Canadienne from Trois Rivières, Quebec. His name first appears as Surgeon of the "Nonsuch," 1668. In March 1674 another surgeon by the name of Heslop appears to have come to the Bay. Economics was introduced at that time as the note in connection with Heslop was to the effect that he was paid £25 as part of his salary. Two weeks after this March 1674 entry, it is noted that Walter Farr petitioned the Company to go as Surgeon on one of its ships and to remain in the country for three years.

Between this time and the arrival of the Selkirk Settlers well over a hundred years was to pass. The story of the Selkirk Settlers is well known and the fact there was opposition in some quarters to their coming is also well known. It is interesting to note that two "Manitoba" doctors played an important role in this undertaking. Dr. Wm. Auld joined the company in 1790 as a Surgeon and at Churchill made a name for himself in his treatment of scurvy. He was also famous as being one of those bitterly opposed to the coming of settlers into this land. In 1810 he was superintendent of the Company's Factories at York, Churchill, Winnipeg (Fort Garry) and Saskatchewan. One would feel that he was probably neglecting his practise at this time. The other doctor referred to was Dr. Abel Edwards. He did practise right in this area in 1812. Dr. Edwards came over with the first group of 76 settlers. He toiled constantly in their interests on the unusually long journey over from Stornoway to York Factory, and brought them to land without an epidemic. Because of the lateness of the season they had to remain for the winter of

1811-12 at a campsite on the Nelson River. They finally reached their destination here in August of 1812. Dr. Edwards immediately set off up the river to Pembina to get extra food for the coming winter. His efforts were obviously the opposite to those of Dr. Auld.

Dr. James White, an Edinburgh graduate, came to Red River in 1814 and practised in this area until his death with Governor Semple at Seven Oaks, just a few miles down North from where we are now.

From 1821 on, this area seems to have had continuous medical services; many names are recorded but again I wish to mention two men, Hamlyn and Bunn. I mention Hamlyn because of the comments about him by Archdeacon Cockran, and Governor Simpson, and Bunn because he is the first native born doctor. He was born in Rupert's Land and took his medical training in Edinburgh practising in this locality until his death which was somewhat mysterious, in 1861. To return to Hamlyn, the first quote is from Thomas Simpson, a cousin of the famous one, "The settlement has been extraordinarily prolific in birth this season. and sickness and mortality are very rare. Dr. Hamlyn, however, seems to find plenty of employment. He has two fine horses and is continually galloping about." Governor Simpson says of Dr. Hamlyn, "The strangest compound of skill, simplicity, selfishness, extravagance, musical taste and want of courtesy I ever fell in with." Archdeacon Cockran's contribution reads, "There is no lawyer and but one doctor (Hamlyn) in the settlement, nor is there much use for either, so harmonious and friendly on the one hand is the intercourse that prevails throughout the community, diversified as it is in race, language and religion, and on the other hand so healthy is the climate that but for the occasional dropping off of old people, death would be forgotten by us altogether." It is still true that in Manitoba the climate is invigorating and healthy and some of its Medical men individualists.

In 1870 Manitoba became a Province and joined the Confederation which came into being in 1867. Names of many doctors appear on the pages of the historical records of that time, such names as Bird, Shultz, Lynch, and O'Donnell are among the many. These doctors were men of the trails, they practised medicine and helped guide the destinies of our country.

In each of the Divisions visited I have made a plea for encouragement and support for any member of our Profession who has an interest in compiling the history of medicine. Why do we wait for fifty or one hundred years before we attempt to chronicle an event? Someone might ask why bother at all? I would answer that to a doctor a good history is the keystone of the arch.

C.M.A. Trail of 1957

I am here today as your guest and in a sense an envoy of the Canadian Medical Association. I bring official greetings from its thousands of members in the other nine Divisions.

May we follow a similar line of thought to that of the last few minutes and take a look at the C.M.A. Trail in this year of 1957? Trails begin somewhere and wind on towards a destination. The C.M.A. Trail began in Quebec on October 9th, 1867, with Dr. Charles Tupper as guide. This trail is still being made and will continue on unless Canadian Medicine begins to lack vision or should lose its ideals. Today we look forward to the time when adequate health care, in its broadest concept will be available to every man, woman, and child of Canada, and Members of this Association will be the custodians of that service, and will form a healthy core of what may now appear to be an utopian ideal.

The C.M.A. Trail has had some rough spots, some portages were difficult, the occasional bog was deep and wide, but this Company, now numbering approximately 12,000 associates travels on. Travellers along the trails we have been talking about did not need a philosopher to argue that "in union there is strength." They knew it from experience and wherever possible they travelled with the train. On this trail we are now considering, our Association is the train, the various Divisions its units. Let us travel wisely by joining the train and sharing the labors.

I often wonder with respect to our Divisions and the parent body just what provision is made for liaison between the Divisional Member sitting behind his office desk and the doctor behind his desk at National Headquarters.

The Executive Committee of the C.M.A. meets four times a year, and as a rule Council only once. Each Division has its duly appointed representatives to each body. We should all see to it that where indicated there is a two-way system of communication between the two doctors, noted above, who occupy offices often many miles apart. This is necessary if we are to have a strong and active organization. How these lines of communication are kept open and functioning is to a large extent a Divisional problem but it is vital to our Association.

I wish to recall to your minds some of the interesting spots on the C.M.A. Trail. We might first note a motion presented at the 14th Annual Meeting at Halifax which read as follows: "that it is the opinion of this Society that specialism should be discountenanced by members of the Society, and that specialists, except in the rare cases, where long experience, extended study, and peculiar aptitude have placed a medical man in a special position to his brethren, should be treated and looked upon as irregular practitioners." . . . There was a slight hesitation on the trail when at

the Annual Meeting of 1893 a motion was presented calling for the disbanding of the Association. This motion was allowed to die a natural death and nothing more has been heard of it. It was probably due to some member of the train having heard a gloomy weather forecast. . . . At the Vancouver Meeting in 1904 a more optimistic note was sounded and it was predicted that attendance never again would fall below 200. . . . Seventeen years later there was the crossing of that deep valley, of few members and fewer funds, when in Halifax some brave guides and leaders gave practical evidence of their faith in C.M.A. and underwrote a deficit of \$10,000 and thus started this organization on the upward climb on the other side of the valley. One name at least should be recalled, J. S. McEachern. . . . There was the coming of a full time Secretary in 1923 and the official introduction of T. C. Routley to C.M.A. activities. . . . Through the efforts of the C.M.A. the Royal College of Physicians and Surgeons was founded in 1929.

With the establishment of the Royal College the training and recognition of the specialist became an important feature in the practise of medicine. In this connection, while I entirely disagree with the member who 48 years before this referred to specialists in critical terms, nevertheless, I have heard it said that at times the child seems to have forgotten its parent. Moreover, I quite believe that we as a profession have failed to integrate the services of the family doctor and the specialist, in providing for the patient the best service which is now available to him. In this fabric of 'adequate care' for our people there is no difference between the warp and the woof. . . . There was the Calgary Meeting of 1934 and the birth of a child called Health Insurance. . . . In 1946 our Association played an important part in the formation of the World Health Organization and the World Medical Association. I hope that at any and every opportunity, in spite of protocol, politics and policy we may continue to play an important role in these organizations. Ladies and Gentlemen, this is ONE WORLD or—No World at all. . . . In 1954 the College of General Practice was formed. I viewed this with mixed feelings. To the extent that it was for the betterment of medical practice, it had my enthusiastic support, and it is now doing much in that direction. In the thinking of some the status of general practice had declined to the point where it required a separate organization to restore lost prestige. I did not feel that such was the case nor that a separation from our main body of medicine would be desirable. To this extent this move had my sincere regrets. It meant to me that somewhere along the Trail our forces had begun to divide. . . . In 1955 our Journal became a bi-weekly publication and thus a prediction of many, many years ago, came true.

Now this is 1957 and here in Manitoba we pause as if to enjoy the customary cup of tea to

those upon the Trail. As we pause we take stock of our present situation, with its satisfactions and its frustrations, and then we look ahead. May we with the experience of the past, the confidence of the present and the hope of the future mark a trail that historians will write about with satisfaction. There is no harm in dreaming, is there?

As we attempt to look ahead what are some of the changes and developments which we might as a profession see on the trail? First I think we will see, not farther away than a short to-morrow's journey, this association, and those who provide government assistance for health care, travelling along side by side on the basis of mutual understanding. Some have referred to this as the Welfare State with our profession submerged. State Medicine was first referred to at the Annual Meeting of 1870, and it has been mentioned periodically ever since. When those of us who value the freedoms of our present methods of practice seem to be becoming a bit lethargic someone calls to mind this Black Douglas. We believe that State Medicine in any form is not the best way to give service to the people but we must acknowledge the right of our fellow citizens to determine to a large extent how they shall pay for their medical care. We have offered to them under our own auspices plans of prepaid medical care to accomplish this. We hope to make them the best and most attractive methods available. Should we fail and the public through government decide that some other method of payment best suited their needs and desires we would have to give wholehearted consideration to their proposals. We will endeavour to safeguard those elements of medical practice which we know to be good and worthy and we will insist on the establishment of machinery of arbitration to settle the problems and misunderstandings which will from time to time arise. It is inevitable that those of government interested in the health of our people, and those of us in the field of practice, must co-operate, each contributing to this service that for which it is best fitted. He may travel fastest who travels alone, but on the trail he is the one most apt not to arrive. 20% to 25% of our people will not or cannot assume responsibility for their Health Services, this is a fact we must not lose sight of, and it is on the trail ahead.

Looking ahead I see the hospital becoming more and more the Health Center of the Community. It may be large—not too large, I hope, many hospitals at the present time are afflicted with gigantism—it may be small, but the doctors' offices will be in the hospital building. This is for convenience and efficiency and the hospital will welcome to its wards all licensed medical practitioners. This will be true because our Profession having seen to their training will know that all are eligible for hospital privileges. Whenever hospital privileges are denied a practitioner someone has caused a step to be taken which for that man lowers his standard of practice. I think

I know whereof I speak, I have practised in this close association with a hospital for over thirty five years.

The future holds much in the way of activity associated with revisions of the Medical Curriculum. Elsewhere I have said that I would hope that it would be made for the student, rather than having the student fit the curriculum. I would hope that teaching in the realm of mental health would be increased many fold. Forty to fifty per cent of our patients require the mental approach. Every doctor must accept his share of this medical load in the future.

There is much in the realm of surgery, in our every day practice, which does not require the precision of the brain surgeon; there is much in the realm of psychiatry which does not require a couch and a psychoanalyst.

One cannot contemplate the C.M.A. Trail for very long without thinking of our sister profession. In services to the patient the nurses have always been beside the Trail. At first they trod a foot-path, later it was a well-marked road, which paralleled ours and the furrows of traffic were side by side, as was seen in many places on the Western Prairies. As we look ahead what are these paths doing? I have heard it said that they are beginning to separate. This must never be, together we must travel on. Perhaps we both became too concerned with our organizations, our standards of training, our degrees, and our certificates. Down the trail a bit I think I see leaders from these two groups assembled in serious discussion and strange as it may seem the center is occupied not by a council table but by a hospital bed, and someone has said, "Now first, let us consider the patient." Nurses' Training Schools will be schools where the academic subjects are taught. Practical teaching and experience will be given only where it can be given, at the bedside.

I see at least one other hill on the road ahead. Strange as it may seem it is one partly of our own making. That does not make it any less real. What is our advice and direction regarding the care and handling of our older citizens when they need

some medical help from you and me? I am convinced that a million dollar building providing a form of custodial care for these elderly people is not the answer. This solution is not a pleasant reflection of our thinking in this day and generation. Such a system is socially and psychologically unsound, I doubt if it is economically buoyant, and I would not wish to spend my twilight years in such an institution. As a profession we have a responsibility to give help and advice to those who face this problem seriously. I have done very little for my elderly patient if I have cured his pneumonia, from which a few years ago he would have died, only to push him out of the front door of the hospital, even if I do it with gentleness. Is "Home Care" a good sized step in the right direction? If so, under whose guidance and care will it be implemented? The tendency now is for the Hospital to stimulate this activity. That is understandable since the hospital is much concerned with elderly people. This will require the best thought that our Profession and our Association can give. Let us not evade it.

The C.M.A. Trail in 1957—it has been an interesting trail, it has been one well worth travelling and we hope that the future will be kind as it winds on into the years. A part of the realization of this hope lies within the care of every medical man in Canada today.

On June the nineteenth last, in speaking at our Annual Meeting, I made reference to a quotation from George Santayana to the effect, that "He who is disposed to ignore history, must be prepared to relive it." Our look at the C.M.A. Trail this evening had more about it than history. Through united effort and wise organization we can help shape the future and we can give to Canadian Medicine a stature which would make it visible from anywhere in the world. I suggest to you, ladies and gentlemen, that through the Canadian Medical Association, we can do just that.

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Department of Health and Public Welfare
Comparisons Communicable Diseases — Manitoba (Whites and Indians)

DISEASES	1957		1956		Total	
	Oct. 6 to Nov. 2, '57	Sept. 8 to Oct. 5, '57	Oct. 7 to Nov. 3, '56	Sept. 9 to Oct. 6, '56	Jan. 1 to Nov. 2, '57	Jan. 1 to Nov. 3, '56
Anterior Poliomyelitis	1	1	7	2	9	16
Chickenpox	38	18	134	25	794	896
Diphtheria	3	.....	16	4	22	29
Diarrhoea and Enteritis, under 1 year	26	16	14	12	184	133
Diphtheria Carriers	4	.....	.....	.....	13	2
Dysentery—Amoebic .....	.....	.....	.....	.....	.....	.....
Dysentery—Bacillary	12	15	.....	2	54	15
Erysipelas	4	.....	.....	.....	12	12
Encephalitis	2	2	.....	3	6	8
Influenza	7120	1767	6	4	8969	92
Measles	60	86	85	48	3443	1263
Measles—German	1	1	1	1	97	164
Meningococcal Meningitis	2	1	.....	1	18	5
Mumps	18	12	57	38	526	1068
Ophthalmia Neonatorum .....	.....	.....	.....	.....	.....	.....
Pneumonia, Lobar .....	.....	.....	.....	.....	.....	.....
Puerperal Fever .....	.....	.....	.....	2	1	3
Scarlet Fever	3	8	12	25	90	133
Septic Sore Throat .....	.....	1	1	5	15	15
Smallpox .....	.....	.....	.....	.....	.....	.....
Tetanus .....	.....	.....	1	2	1	5
Trachoma	1	.....	.....	.....	1	.....
Tuberculosis	44	56	43	53	445	615
Typhoid Fever .....	.....	.....	.....	.....	2	.....
Typhoid Paratyphoid .....	.....	.....	.....	.....	.....	1
Typhoid Carriers .....	.....	.....	.....	.....	1	.....
Undulant Fever	2	2	.....	.....	11	9
Whooping Cough	5	5	20	21	125	361
Gonorrhoea	97	113	103	103	998	1110
Syphilis	12	7	10	4	88	64
Psittacosis .....	.....	.....	.....	.....	.....	1

Four Week Period October 6 to November 2, 1957

DISEASES	*850,000 Manitoba	*280,000 Saskatchewan	*5,404,933 Ontario	*2,952,000 Minnesota
(White Cases Only)				
*Approximate population				
Anterior Poliomyelitis	1	3	8	2
Chickenpox	38	.....	330	.....
Diarrhoea and Enteritis under 1 yr.	26	10	.....	.....
Diphtheria	3	.....	5	10
Diphtheria Carriers	4	.....	.....	.....
Dysentery—Amoebic .....	.....	.....	.....	.....
Dysentery—Bacillary	12	.....	1	13
Encephalitis Epidemic	2	19	.....	.....
Erysipelas	4	.....	4	.....
Influenza	7120	125	18696	15675
Jaundice, Infectious	26	21	19	19
Measles	60	2	97	6
German Measles	1	1	43	.....
Meningitis Meningococcal	2	.....	5	3
Mumps	18	4	175	.....
Psittacosis .....	.....	.....	.....	5
Puerperal Fever .....	.....	.....	.....	.....
Scarlet Fever	3	.....	47	9
Septic Sore Throat .....	.....	.....	8	26
Smallpox .....	.....	.....	.....	.....
Tetanus .....	.....	.....	.....	.....
Trachoma	1	.....	.....	.....
Tuberculosis	44	29	78	77
Typhoid Fever .....	.....	1	4	.....
Typhoid Para-Typhoid .....	.....	.....	.....	.....
Typhoid Carrier .....	.....	.....	.....	.....
Undulant Fever	2	.....	3	3
Whooping Cough	5	.....	154	.....
Gonorrhoea	104	↑	143	↑
Syphilis	13	↑	33	↑

†These figures were not given on their reports.

DEATHS FROM REPORTABLE DISEASES

October, 1957

Urban—Cancer, 55; Diarrhoea and Enteritis, 1; Influenza, 9; Pneumonia, Lobar (490), 4; Pneumonia (other forms), 11; Poliomyelitis, late effects, 1; Septicaemia & Pyaemia, 1; Syphilis, 1; Tuberculosis, 4; Other bacterial diseases, 1. Other deaths under one year, 17. Other deaths over one year, 197. Stillbirths, 16. Total, 318.

Rural—Cancer, 26; Diarrhoea and Enteritis, 2; Influenza, 9; Measles, 1; Pneumonia, Lobar (490), 1; Pneumonia (other forms), 5; Septicaemia and Pyaemia, 1; Tuberculosis, 3; Unspecified forms of dysentery, 1. Other deaths under one year, 10. Other deaths over one year, 144. Stillbirths, 6. Total, 209.

Indians—Diarrhoea and Enteritis, 1; Influenza, 1; Pneumonia (other forms), 1. Other deaths under one year, 6. Other deaths over one year, 4. Stillbirths, 1. Total, 14.

Anterior Poliomyelitis—One case with slight paralysis reported from Greater Winnipeg in an adult.

Diphtheria—One further case at Portage la Prairie has been confirmed today (November 18).

Influenza—From reports received the epidemic is waning in the northern part of the province but still strong in other parts. Over 22,000 cases have been reported to date with likely five or six times this number not reported. Three deaths directly attributed to the flu have been confirmed by laboratory test.

Syphilis—An increase is noticed here due to a local epidemic of twenty primary and secondary cases, at least eight of which were immigrants.

Detailmen's Directory

Representing Review Advertisers in this issue, whose names are not listed under a business address.

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